

Silas



TORREY C. BROWN, M.D.
SECRETARY

JOHN R. GRIFFIN
DEPUTY SECRETARY

STATE OF MARYLAND
DEPARTMENT OF NATURAL RESOURCES
MARYLAND GEOLOGICAL SURVEY

THE ROTUNDA
711 W. 40TH STREET, SUITE 440
BALTIMORE, MARYLAND 21211

KENNETH N. WEAVER
DIRECTOR
MARYLAND GEOLOGICAL SURVEY

EMERY T. CLEAVES
DEPUTY DIRECTOR

Division of Archeology
338-7236

19 September 1984

Mr. Louis H. Ege, Jr., Acting Chief
Bureau of Project Planning
P.O. Box 717/707 North Calvert Street
Baltimore, Maryland 21203-0717

RE: Competitive Consultant Proposals
Archeological Services
I-95 (Capital Beltway)
Maryland Route 210 and I-295
Prince George's County

Dear Mr. Ege:

My staff and I have reviewed the subject project technical proposals from the following firms:

- 1) Garrow and Associates, Inc.
- 2) John Milner Associates, Inc.
- 3) Louis Berger and Associates

The Garrow and Berger proposals are of high quality. Both present well-formulated research goals, clearly describe field methodology, detail analytical procedures, and place archival research in site-specific and regional perspectives. Both indicate good project management capabilities.

Berger has the best-qualified staff with Mid-Atlantic experience including an in-house historian, a colonial garden expert, and other specialists. Management appears well-designed, including weekly field meetings and monthly reports. Field work is scheduled for completion on 3 June 1985, and report preparation is scheduled to begin in May before

completion of field work. The budgeted ratio of analysis/report preparation to field time is the highest among the three proposals. Berger's proposed completion date for a draft report is scheduled for 2 January 1986 (erroneously stated as 1985 in the proposal). The Berger schedule maximizes the amount of time available for analysis and report preparation, an exceptionally important consideration given the large scope of the project and the tight time frame for completion. The only major negative aspect of the Berger proposal relative to the other two proposals is they offer over 11,000 fewer man-hours than either of the other two.

Advantages of the Garrow proposal are the detailed presentation of research goals and methodology, a field laboratory computer terminal, a full-time project manager, and the most man-hours of the three proposals. On the other hand, Garrow's ratio of analysis/report preparation to field time is low even when adjustments are made by moving the field lab technician time to the office phase and time is added for archival/historical research by consultants. The Garrow field/lab director appears to be primarily experienced in Mesoamerican archeology and project management rather than in field and laboratory research in the Mid-Atlantic area, and the archival/historical subcontractor is not clearly experienced in the Mid-Atlantic region. Garrow does not provide for detailed soils analysis, specify site security measures, or indicate a date for draft report completion. Garrow does not propose beginning report writing until September after data analysis is completed which leaves little time for completion and report production by the end of the year.

The Milner proposal is clearly of much lower quality than the other two. While the staff is experienced in the Mid-Atlantic area, overall research goals are not discussed, and management control appears weak. Descriptions of field methodology, artifact analysis, and supplementary analytical techniques are sketchy or not discussed. Archeological research methods are only briefly indicated. While the number of man-hours is high, only a quarter of that time is to be spent on archival research, specimen cataloguing, laboratory analysis, and report preparation. On the basis of their proposal, it is not clear that Milner would be able to complete the project in a satisfactory manner or within the time available.

In summary, I recommend that Milner not be considered for the project. Both the Berger and Garrow proposals are of high quality, but Berger is preferred because of staff expertise, project scheduling, and management capabilities.

Please do not hesitate to contact me if you would like to discuss my recommendations.

I would like an opportunity to review a draft of the contract document with the selected consultant to reduce the possibility of misunderstandings or important omissions that may adversely affect technical aspects of the project.

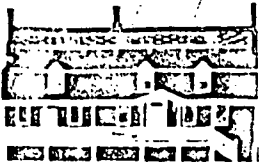
Sincerely,



Tyler Bastian
State Archeologist

TB:lw

cc: Dennis Curry
Silas Hurry
Maureen Kavanagh
Charles Harrison
Richard Hughes
S. Donald Sherin
Cynthia Simpson
Rita Suffness



Silas
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MAR 24 1986

Maryland Historical Trust

March 18, 1986

Division of Archeology

Mr. Dale Hutchison
Director of Planning
The Maryland-National Capital Park and
Planning Commission
County Administration Building
Upper Marlboro, Maryland 20772

RE: Concept Plan for PortAmerica
Development Project, Oxon Hill,
Maryland

Dear Mr. Hutchison:

This agency has reviewed the concept plan for the PortAmerica project submitted to your office by James T. Lewis Enterprises, Ltd. (Capital Enterprises No. 2 Limited Partnership). Based upon our review, we are concerned with the proposed project's effect on historic properties, specifically the Oxon Hill Manor, a property listed on the National Register of Historic Places, and the Addison House Archeological Site which has also been determined to be eligible for listing on the National Register. We are particularly concerned that the concept plan nowhere addresses the proposed developments' effect on these historic resources. Our concerns and recommendations are outlined below.

First, it is clear from the information presented in the Concept Plan that the proposed 52 story World Trade Center, the 15 story office structure complex to its east and possibly other structures would be visible from Oxon Hill Manor. The introduction of such visually out of character elements into the environment would dramatically alter the views from Oxon Hill Manor and thus have an adverse effect on the integrity of its setting, feeling and association with the historic landscape in which it is located. Earlier reviews of this project by the MNCPPC, the National Park Service and the National Capital Planning Commission all recommended that the views and vistas from Oxon Hill Manor should be preserved. We strongly concur with and support this recommendation.

Second, the PortAmerica property contains in its northeast portion the archeological remains of the 1710 Addison House and its associated outbuildings, cemetery, mausoleum, and other features, as well as, possibly, the grave of John Hanson, first president of the United States under the Articles of Confederation, who died there in 1783. The history of this site, coupled with data obtained during recent archeological investigations conducted by the Federal Highway Administration within a portion of the site prior to construction of the "S-Curve" roadway linking I-95 and Oxon Hill Road, indicates that the archeological remains present there are among the most significant in Maryland. It should be noted that the site has been determined to be eligible for listing on the National Register of Historic Places and is listed in the Prince George's County Historic Sites and Districts Plan as a component of the Oxon Hill Manor Site (Inventory No. 80-1, p. 70). It is clear from the concept plan that all elements of the Addison House Archeological Site would be destroyed by the proposed construction and landscaping.

Mr. Dale Hutchison
March 18, 1986
Page Two

Based upon the concerns outlined above, it is our recommendation that the PortAmerica Concept Plan not be approved unless it is modified to ensure the protection of historic and archeological resources. These modifications should ensure that the following conditions are met:

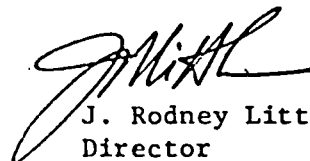
1. The height of all buildings will be restricted so as to preserve the integrity of the still-existing historic views from Oxon Hill Manor.
2. Prior to initiation of any ground disturbing activity in the northeast portion of the project area, all significant components of the Addison House Archeological Site will be identified and an appropriate plan to mitigate the adverse effects of the proposed development upon those resources will be developed. This plan should, as a first option, preserve in-place and interpret the identified archeological remains. If preservation in-place is not possible, an appropriate plan of archeological data recovery will be developed and carried out.

If these conditions are fulfilled, we would have no objection to approval of the Concept Plan.

Finally, we note that the Concept Plan proposes roadway connections to Interstate Routes 95 and 295, and that extensive dredging and filling operations will take place in Smoot Bay. As all of these undertakings require the obtaining of Federal licenses and permits, it should be noted that the responsible Federal agencies will be required under the National Historic Preservation Act to consider the effect of their actions on the National Register listed and eligible resources within the project area. In order to facilitate this Federal review process, it is in the best interest of the developer to ensure that adequate consideration of historic and archeological resources is a part of all development plans. As the state agency responsible for assisting and advising the responsible Federal agencies, we would be happy to work with the MNCPPC, the developer and any other involved parties in developing appropriate measures to ensure the protection of historic and archeological resources.

If I can provide additional information you may require, please feel free to call me or my staff archeologist, Richard Hughes, at 269-2438. Thank you for this opportunity to comment.

Sincerely,



J. Rodney Little
Director
State Historic Preservation
Officer

JRL/RBH/hec

cc: Ms. Gail Rothrock
Mr. Alan Feinberg
Mr. Tyler Bastian
Mrs. Sara Walton
Mr. W. Dickerson Charlton
Mr. Ronald Anzalone

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Division of Archeology
338-7236

21 March 1986

Mr. Dale Hutchison
Director of Planning
Maryland-National Capital Planning
Commission
County Administration Building
Upper Marlboro, Maryland 20772

RE: Port America impact on important
archeological site

Dear Mr. Hutchison:

Among the most important archeological sites in Maryland is the Addison or Oxon Hill plantation site in southern Prince Georges County. The manor house was one of the earliest and largest in tidewater Maryland and Virginia, and, as revealed by the historical and archeological record, was associated with many outlying storage structures, housing for assistants and slaves, and a formal garden. The site is especially remarkable for its exceptionally good state of preservation as a result of the site having been abandoned and unused since late in the last century when the manor house burned.

In recognition of the importance and uniqueness of Oxon Hill to Maryland history and archeology, the State Highway Administration has funded a series of archeological investigations within the relatively small portion of the site to be impacted by the proposed new I-95/MD 210 interchange. The report on this work is currently being revised in response to reviewers' comments and should be available in final form from the State Highway Administration within a few months. The findings documented in the report further substantiate the importance of Oxon Hill and emphasize the even greater potential of the remainder of the site including the manor house site itself, most of the formal garden, several outbuildings, slave quarters, and family cemetery.

The Port America concept plan by James T. Lewis Enterprises, Ltd., recently submitted to your office, does not consider the deleterious impact of the project on the important archeological resources at Oxon Hill. In view of the special importance of the site to Prince Georges County and Maryland, it is essential that some plan be developed to conserve as much of the site as possible, preferably by avoidance, or, alternatively, by selected data recovery prior to the start of development. The implications of this request for the developer's plans and costs are considerable but Port America may be able to turn site conservation to their advantage through tax savings, sales promotions, and favorable publicity.

Oxon Hill is a singular, nonrenewable resource that cannot be duplicated elsewhere in the county or state or possibly even in the tidewater region. Official recognition of the importance of the site is attested to by the commitment of the Highway Administration to conserve as much as possible by alignment modification, plans for a retaining wall to protect the manor house site, and data recovery in areas that could not be avoided.

Please let me know how I can work with you to facilitate protection of the unique record at Oxon Hill.

Sincerely,

Tyler Bastian
State Archeologist

TB:lw

cc: Allen Feinberg
Gail Rothrock
J. Rodney Little

GARROW & ASSOCIATES, INC.

2215 Perimeter Park, Suite 15
Atlanta, Georgia 30041
404/451-0513

P.O. BOX 900008, ATLANTA, GEORGIA 30329
(404) 325-0309

September 4, 1984

RECEIVED

SEP - 4 1984

BUREAU OF
CONSULTANT SERVICES

MR. S. Donald Sherin
Chief, Bureau of Consultant Services
State Highway Administration
707 North Calvert Street
Room 414
Baltimore, Maryland 21202

Re: Technical Proposal for Archaeological Services
I-95 (Capital Beltway)/ Md. Rte. 210 and I-295

Dear Sir:

Garrow & Associates, Inc. is pleased to submit for your consideration this Technical Proposal for the above referenced project. We have attempted to follow carefully the project Resume for Consultant Services and to address with precision the project specifications as presented in documentary form and at the Pre-Proposal Conference.

Garrow & Associates, Inc. believes it has developed a sound, efficient program of research that can be managed effectively through all project phases and tasks. We further believe that the significant potential of the Oxon Hill Manor site has been addressed through several detailed research hypotheses, and that appropriate, efficient methods have been proposed. Our proposed project team combines related technical experience with a successful history of joint work on large, complex archaeological projects. Garrow & Associates, Inc. is a successful, well organized and managed firm with the capability to carry out such a study program, and see it to completion.

We thank you for the opportunity to submit this proposal, and we look forward to working with you on this project. Please do not hesitate to call me if we can provide any additional information.

Sincerely yours,

GARROW & ASSOCIATES, INC.

Barbara Avery Garrow

Barbara Avery Garrow
President

TECHNICAL PROPOSAL

Archaeological Services
I - 95 (Capital Beltway)
Md Rte. 210 and I - 295
Prince Georges County

Submitted By: Garrow & Associates, Inc.

TECHNICAL PROPOSAL

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I. SCOPE OF SERVICES

The Oxon Hill Manor Archaeological Project is designed to recover a maximum amount of archaeological data that may be impacted by highway interchange modifications at Interstates 95 and 295 and Maryland Route 210, in Prince George's County, Maryland. The archaeological project will involve field excavation, artifact and other analyses, specimen conservation, and preparation of a descriptive and synthetic report. Based on several previous, more limited studies of the site area, the Maryland State Highway Administration (working in conjunction with other agencies) has developed an initial plan for the study project. This plan involves carrying out field investigations between January 2 and June 30, 1985, and completing analysis and report preparation by January 2, 1986. Several study areas at the Oxon Hill Manor locality have been identified by the State Highway Administration, and study methods for these have been outlined. These areas are discussed below, and general excavation strategies as proposed by Garrow & Associates are presented.

Area I contains a filled well, Manor House wing remains, and portions of the Manor side yard. This area comprises approximately 650 square meters. This area shall be excavated manually, using excavation techniques to be described in the Field Methods section of the Work Plan. The filled well will also be excavated manually, unless safety considerations dictate alternate approaches (see the Field Methods section of the Work Plan). Within Area I in general, excavation will be conducted (on the lowest level) within one meter units; it is also proposed that these units be combined into a number of ten by ten meter blocks. These blocks would be excavated in a sequence to provide continuous and efficient access through Area I and to provide stages in the excavation process should decisions altering the planned process be necessary. Alterations might include decreasing the Area I sample and commitment of resources to Area VI or other Areas.

Area I may contain data relevant for discerning the division and utilization of yard space, and may subsequently yield data regarding more general questions relating to land use patterns. Analyses of the archaeological materials recovered from the filled well will be focused upon the several aspects of foodways, and shall include floral, faunal, ceramic, and glass components. A detailed study of these materials can provide insight into acquisition, preparation, consumption, and discard patterns, and the overall social status of the occupants of Oxon Hill.

Area II consists of mixed slope trash deposits of different temporal periods and covers an area 20 meters by 90 meters (1800 square meters). This area will be subjected to a systematic

sampling strategy resulting in the excavation of approximately 40 one meter square test units, constituting a 2.5 percent sample (rather than the 5% sample in the Resume for Consultant Services). We propose to develop our sampling in an unaligned, random manner to avoid coincidence of our units with any potential regularized archaeological feature pattern. We will divide Area II into 18 ten by ten meter blocks, using the grid system of Hurry (1984). Each block will contain two one by one meter units, drawn randomly. Should any of these units match a unit previously excavated by Hurry, an alternate unit will be chosen. This will provide 46 units (including ten excavated by Hurry). Nine additional units will be excavated to follow or expose features or to solve problems associated with soil anomalies.

Cultural materials recovered from these excavations shall be examined to determine diachronic status changes peculiar to the various occupants. A trench, oriented north-south, shall be mechanically excavated to determine stratigraphic sequences and inter-relationships. The stratigraphy and associated anomalies shall be documented, and an assessment of the degree of slope wash and stratigraphic inversions evaluated. The southern and southeastern portions of Area II shall also be tested to locate and identify any structures that may correspond to those annotated on the 1863 topographic survey. We propose an additional five one meter units for this area.

Area III contains a subrectangular mound. In order to obtain stratigraphic visibility, two trenches, perpendicular in arrangement, shall be mechanically excavated. Twenty-five one meter square units will be placed in and around the mound. The placement of these 25 units will be determined in part by the results of the mechanically excavated trenches. Should the trenches indicate that structural/architectural features are present, we would expect that most of the 25 units (along with the 10 additional discretionary units) would be required to expose these features and understand their layout. At least ten units will be reserved in any case for sampling the area surrounding the mound to recover data concerning yard usage. Artifacts recovered from the excavation shall be used to provide a temporal guide to the construction of the mound and to discern how yard space was organized and utilized through time, especially how tenants may have used this area differently than the owners.

Area IV, a landscaped garden, was formed, at least partially, as the result of fill deposition. Trenches, oriented in a north-south direction, shall be mechanically excavated at 10 meter intervals. Stratigraphic profiles and soil anomalies shall be documented. Trenches, oriented in an east-west direction, shall also be mechanically excavated at 10 meter intervals. Soil profiles in this series of trenches shall also be documented. The area will be subdivided into 100 square meter blocks; each block receiving a one meter square, manually excavated test unit. This unit will be

selected randomly within each block. Should it coincide with a unit previously excavated by Hurry (1984), an alternate unit will be chosen. Fifteen additional one meter square test units may be excavated to address additional research questions that may arise. After machine and unit excavation, the humus level shall be mechanically removed, and the underlying fill examined for cultural features. Upon completion of intrusive feature excavation, each subsequent fill stratum shall be mechanically excavated, examined for features, and so forth. In the event that a buried "A" horizon is encountered, a small block excavation will be designed as appropriate and excavation will proceed manually, using a one meter square control format, until subsoil is reached. This stratum shall be examined for features which, if present, shall be manually excavated. The primary research objective for Area IV shall be the collection and analysis of data pertinent to discerning or inferring social status from the use and display of space, although it is expected that prehistoric deposits and features may be encountered in the buried "A" horizon.

Area V contains a depression and a mound. In the event that this feature cannot be avoided by the right of way, ten one meter square test units shall be excavated. These units will be placed to investigate the depression, the surrounding elevated mound, and the adjacent area. Attention will be focused on the location and identification of structural remains, and dates of construction and subsequent abandonment. Five additional one meter square test units may be excavated should structural remains or associated features be encountered.

Area VI is currently undergoing an archaeological reconnaissance. The results of that study will delineate the nature and extent of investigations of Area VI to be performed as part of this project.

Garrow & Associates, Inc. proposes to carry out the above described services according to the detailed Work Plan presented in the following sections. Garrow & Associates, Inc. further agrees to the following items:

(1) Entry rights will be obtained from the State Highway Administration and detailed coordination during all project phases will be maintained.

2) A detailed descriptive and synthetic study report will be prepared. Garrow & Associates, Inc. will follow a report a format devised or approved by the State Highway Administration.

(3) The State Highway Administration will provide a copy of each of four previous reports on the Oxon Hill Manor study area, along with topographic maps and an aerial photograph. The State Highway Administration will also provide backhoe services for a maximum of three 3-day periods.

(4) Garrow & Associates will use, to the fullest extent possible, data already recovered from the Oxon Hill Manor site. Our grid system will follow previous work, and we will attempt to include previously collected artifacts and other data in our analysis. Previous investigators will be contacted and encouraged to provide their insights and share their experience.

(5) Garrow & Associates, Inc. will complete work according to the following schedule. Field work will be completed by June 30, 1985; laboratory and report preparation will be completed by January 2, 1986.

II. WORKPLAN

A. METHODS OF APPROACH

Background Information And Research Themes

Historical research conducted during prior investigations (Hurry 1984) indicates that Oxon Hill Manor was constructed by the Addison family in 1710 or 1711. The property remained in the hands of the Addison family until 1810. The Addisons apparently enjoyed an extremely high socio-economic status, both in relation to the area in which they lived and the country as a whole. The property was sold to the Berry family in 1810, and Oxon Hill Manor appears to have been occupied by renters during the Berry ownership. The property was apparently sold by the trustees acting on behalf of Thomas Berry in 1891. Nothing is currently known concerning property occupancy in 1895 when the manor house burned (Hurry 1984:8-20). No data have been gathered to date to indicate the socio-economic statuses of the post-1810 occupants of Oxon Hill Manor.

The testing and assessment reports generated as a result of prior investigations of Oxon Hill Manor (Epperson 1980; Dent 1983; and Hurry 1984) indicate that that site is an extremely complex archaeological resource. Historic occupation of the site dates from 1710/11 to at least 1895 (Hurry 1984:8-20), and a small prehistoric component is also included within the proposed excavation area. The areas to be excavated include a side yard section of the manor house, which includes a filled well, portions of what had been formal gardens, trash disposal areas, and outbuilding sites. It is anticipated that numerous archaeological features will be found within the excavation areas, and that features representative of the entire occupation span will be present. The area to be excavated does not include the core of the manor house, but may include a wing that was added at an unknown point in time.

The latest reported testing project on Oxon Hill Manor (Hurry 1984:63-66) generated a series of research questions that can be tested by future investigation of that site. Those questions fall into two broad categories, with considerable overlap. One category addressed internal patterning (structure) of the site through time, and how changes in that patterning might be reflective of differing world views of the site inhabitants. The second broad category was the question of the relative socio-economic positions of the site inhabitants through time, and how those differing levels would be reflected in the site layout and content. The research domains

suggested by the Hurry (1984) report form the core of this proposed research design, as they are substantive and important realms of inquiry. Additional lines of inquiry are also incorporated among the research hypotheses that follow, as Oxon Hill Manor appears to be a suitable site to use for addressing finer questions concerning inter- and intra-site interaction patterns.

Specific Research Questions

The first hypothesis to be tested under this project deals with the manner in which space was utilized within the site. That hypothesis states:

HYPOTHESIS 1. The world view of the inhabitants of a site has a specific series of effects on the design and use of space within that site. This should be empirically demonstrable in the archaeological record.

Oxon Hill Manor was constructed as a formal, Georgian styled great house complex, and contained a formal garden and a series of outbuildings during the eighteenth century. Utilization of space within this great house complex was apparently rigidly controlled during at least the occupations by the Addison family (1710/11-1810), and that rigid control of space should be reflected archaeologically. The world view of the post-Addison occupants appears to have differed, and those variances should be reflected in differing artifact patterning and feature placements within the site.

Substantive evidence was presented in the Hurry (1984) testing report to indicate that Hypothesis 1 will be a fruitful line of inquiry. Photographs reproduced by Hurry (1984: Fig. 9) support the contention that the manor house was constructed in the Georgian style, and that the structure contained two formal facades. Further, evidence of the formal garden was found in Area IV during testing, and eighteenth and nineteenth century artifacts appear to have been differently distributed within the site. Nothing is currently known concerning the socio-economic statuses of the residents of Oxon Hill after 1810, but the extremely high socio-economic status of the Addison family has been firmly established.

The question of the application of the concept of the "Georgian mindset" to the Addison family has been succinctly stated by Hurry (1984:64). He stated:

Deetz (1977) and Glassie (1976) have pointed out that the shift to Georgian architecture and site design are parts of a larger change in world view with concomitant physical manifestations in yard arrangement and house

form and plan. This change is representative of a greater sense of order and the individual and relates to the florescence of Renaissance ideas in England (Deetz 1977:111, 114, 115, and 117). The Addisons and similar elites were the popularizers of this new world view. Hence, their use of space should mirror this mindset. How the Addisons divided and decorated their yards provides unique insights into these individuals as 'Georgian' gentry and conspicuous consumers advertising their wealth and status within the tobacco-based oligarchy of Tidewater Maryland.

Study of the layout and composition of Oxon Hill Manor will thus provide a rigorous test of the assumption that the "Georgian mindset" of the Addisons was indeed physically manifested within their estate. Hypothesis 1 has implications for historic archaeological research that extend beyond the boundaries of the Oxon Hill Manor site. The distribution of artifacts within historic sites has been a topic of discussion within historic archaeology for a number of years (cf. South 1977). As stated above, Deetz (1977) and Glassie (1976) have espoused the view that the world view or "mindset" of the occupants of a site can be captured and measured archaeologically. One problem that has been encountered with testing that concept is that it often is not possible to find sufficient historical documentation on a study site to act as a control for finely ascribing socio-economic status, much less world view (cf. Garrow 1982; Klein and Garrow 1983; and Garrow, Friedlander, and Nicklas 1983). It is apparent that sufficient documentation is available on the Addisons to finely describe the socio-economic status they enjoyed (Hurry 1984). Hopefully the additional archival research proposed for this project will provide a more complete view of the Addisons and provide critical data concerning later residents.

The null hypothesis in this case would be that world view or "mindset" is not the controlling factor in determining how space is utilized within a site. It is possible that local economic conditions or even site topography could exert more control over feature and artifact distributions within a site, and that may be the case for Oxon Hill Manor. Substantiation of the null hypothesis could have far reaching implications. Support for the null hypothesis would be indicated if the excavated artifacts and features proved to be dispersed in a similar manner for the Addison and post-Addison occupations, and if the post-Addison occupants did not prove to reflect the same world view. This would indicate that the site was ordered following some currently undetected set of criteria, and would bring into question the views expressed by Deetz (1977) and Glassie (1976) concerning the physical expressions of "mindset". In any event, the support or nonsupport of this hypothesis would represent an important theoretical contribution to historical archaeology.

A number of steps will have to be taken in order to insure adequate testing of Hypothesis 1:

- It must be demonstrated through archival research that the inhabitants were aware of the "Georgian world view" and that they reflected that world view in their actions.
- It must be demonstrated through the internal patterning of artifacts and features that the use of space within the site actually conformed to a preset plan, and that the internal patterning of the site has meaning under Hypothesis 1.
- It must be demonstrated that the internal patterning of space was in response to topography or other factors if the world view hypothesis is not operative.

The concept of how world view is reflected archaeologically will not be restricted to the Addison occupation. If the assumption that world view determines space utilization is correct, it will be appropriate to also study the post-Addison occupants and attempt to characterize their world view(s) and how that affected their use of space within Oxon Hill Manor. Further, it will be appropriate to study all portions of the site within the excavation area to attempt to discover if the Addisons imposed their world view and sense of order on all inhabitants of the great house complex, or if varying expressions of world view existed within the site (i.e. in slave areas) at given points in time.

The second hypothesis to be tested on this project presents a mechanism for studying the socio-economic levels enjoyed by the site inhabitants through time by using a combination of historical and archaeological research. Hypothesis 2 states:

HYPOTHESIS 2. Use of space within a site and items consumed and discarded by residents of that site reflect status advertisement of the site occupants, rather than a response to functional considerations or least cost economics.

There are some assumptions that can be made about the relative socio-economic statuses of at least some of the residents of Oxon Hill Manor. The Hurry (1984) report has clearly indicated that the Addison family was counted among the Colonial planter elite, and freely expressed that status through conspicuous consumption of luxury items. Virtually nothing is known concerning the site occupants after 1810, except that the site was apparently not owner occupied. The site was occupied by James E. Bowie in 1863 (Hurry 1984: Figure 7), but nothing concerning Bowie is currently known. Given the relatively close proximity of Oxon Hill Manor to the nation's capital, it is possible that the site was occupied by families with national political prominence who enjoyed relatively high socio-economic statuses and only lived at Oxon Hill for part of each year. It does seem more likely, though, that the post-1810 residents of Oxon Hill enjoyed somewhat more modest socio-economic

positions than the Addison family.

It is probable that at least some, and perhaps most, of the post-1810 occupants of Oxon Hill Manor will be identified through archival research. The methods that will be used to identify and document the post-1810 residents are discussed in the Research Methods Section. High priority will be given to gathering social and economic information on those individuals during the historical research.

At the consultant's conference on August 14 it was confirmed that there are Addison family papers that have not yet been researched. Those family papers may or may not contain information concerning the physical layout of Oxon Hill Manor, but certainly should yield valuable data concerning the Addison's perceived socio-economic standing and their relative world views.

Historical research has been an integral part of the determination process involved in assessing relative levels of socio-economics on past projects. One example of the role played by historical research regarding this question was developed on the Wilmington Boulevard Project (Klein and Garrow 1983), conducted in Wilmington, Delaware. A mid-nineteenth century context explored during that project contained a relatively expensive ceramic assemblage (following Miller 1980). Historical research indicated that the residents of the general study block should be assigned to a much lower economic position than that indicated by the ceramic analysis. This triggered special study of the results of the faunal analysis, which supported the low economic level indicated by the historical research. The ceramic evidence was then reconsidered, and a solution to the inconsistent data sets was formulated. The anomalous ceramic analysis results were interpreted as reflective of residents in sharp economic decline, which means that the ceramic analysis had reflected their former, not current, socio-economic status.

A problem encountered with the Wilmington Boulevard Project (Klein and Garrow 1983) historical research, which probably will not be encountered at Oxon Hill, was that it was virtually impossible to establish the identities of individual residents for those properties not owner occupied. The difficulty in the case of the Wilmington Boulevard Project stemmed from the presence of very high population density and the lack of previously expected comprehensive street directories. The rural setting of Oxon Hill, coupled with the anticipated high visibility of a property of that type in the historical record should help to mitigate that problem.

Assignment of socio-economic status based on ceramic analysis (Miller 1980) is rapidly becoming accepted in historical archaeology (cf. Geismar 1983: 414-417; Garrow 1982:115-128). This technique does have limitations, however, in that index values for bowls prior to 1814 have not yet been developed, and indices for

cups and plates are unavailable prior to the 1790's (Miller 1980:26, 30, and 33). Miller developed few index values that were comprehensive past the mid-nineteenth century. Late nineteenth and early twentieth century index values have been developed by Henry (Henry and Garrow 1982:322-336). The advantages and limitations of the ceramic economic scaling techniques will be fully discussed in the Research Methods section of this proposal, but it is sufficient to state at this point that a quantifiable economic scaling technique for ceramics exists for only part of the occupation span of Oxon Hill Manor. There are methods to deal with eighteenth century ceramics (cf. Wise 1976), but none have been as well validated as the Miller and Henry techniques.

Socio-economic determinants based on specialized glass analysis is not as well advanced as ceramic analytical techniques, but there are techniques available. One technique involves the study of lead versus soda-lime glass among tablewares (Geismar 1983:317), which appears to have promise on collections from eighteenth century occupations. That and other methods will be discussed in the Research Methods Chapter.

Increasing attention is being devoted within historical archaeology to studies of socio-economic status based on faunal studies (cf. Singer n.d.; Klein and Garrow 1983; Drucker 1981; Otto 1975; Schulz and Gust 1983). The isolation of socio-economic parameters at Oxon Hill will concentrate on the identification of cuts of meats associated with the site residents, the seasonality of use, and the relative percentages of specific fish species represented in the resident's diet. It is anticipated that the cuts of meat represented in the Oxon Hill contexts will reflect the relative socio-economic statuses enjoyed by those who consumed that meat. This is based on the assumption that cuts of meat varied in price in direct proportion to factors that would make them either highly desirable or marginally acceptable to the consumer. The socio-economic mirror offered by studying the relative cuts of meat present in a given sample is probably less accurate on a rural than an urban site, but should still provide valuable insights. Seasonality of deposition of a context in relation to the availability of a particular type of meat during that season can provide insights into the socio-economic status enjoyed by the consumers of that meat. Simply stated, meat consumed in a season in which that meat is a normally unavailable or rare resource will be more expensive to procure than other potential dietary choices. Fish analysis (Singer n.d.) has proven to be an excellent way to determine the relative socio-economic status of the consumers of that fish. Singer (n.d.) has devised a scaling technique for fish similar in concept to the Miller (1980) technique for ceramics that can return quantifiable socio-economic data. The Singer technique, as well as the methods employed for faunal retrieval and analysis are discussed in the Research Methods section.

No quantifiable technique currently exists for converting the

results of floral analysis into statements of socio-economic status. Floral analysis will be used on this project, however, in an attempt to identify the exotic flora growing on different sections of the site through time, and that should provide some insights into the changing socio-economic patterns within Oxon Hill Manor through time. Methods of floral recovery and analysis are discussed in detail in the Research Methods section.

Observations on the nature of the physical structure of Oxon Hill Manor through time should provide excellent insights concerning the socio-economic statuses of the residents through time. This directly relates to Hypothesis 1, and links the first two Hypotheses.

The null hypothesis of Hypothesis 2 would be that the layout of Oxon Hill manor and the items used and discarded by the site inhabitants were determined by functional and/or economic least cost decisions. Support of the null hypothesis could lead to reconsideration of the role of socio-economic studies in American historical archaeology, but in this case it appears highly unlikely that the null hypothesis will be supported.

There are a number of steps that must be taken in order to insure adequate study of Hypothesis 2:

- The level of disposable wealth of the inhabitants of Oxon Hill Manor must be demonstrated through a) archival research and b) the presence of high cost architectural and artifactual (both artifacts and faunal evidence) consumption/discard choices.
- Study of the internal patterning of Oxon Hill must demonstrate that the use of space was not based on utilitarian (functional) choices.
- Socio-economic variability over time must be demonstrated archaeologically if varying socio-economic levels of site inhabitants can be demonstrated through archival research.

Hypothesis 2 is therefore closely tied to Hypothesis 1. The second hypothesis is not restricted to the Addison occupation, and can be applied to all residents of Oxon Hill. Changes in expression or advertisement of socio-economic statuses by residents who were not the owners of the property they occupied will be of great interest on this project.

The third hypothesis addresses one aspect of the intra-site interaction patterns anticipated to be present and reflected archaeologically at Oxon Hill Manor. Hypothesis 3 states:

HYPOTHESIS 3. The socio-economic positions of lower status groups at a plantation such as Oxon Hill correlates to at least some degree with the socio-economic position of the socially and

economically pre-eminent family within the plantation.

Thomas Addison owned 79 slaves in 1727, of which apparently 28 resided in the main house complex (Hurry 1984:8, 16). Three indentured servants also resided in the main house complex in that year. Thomas Addison (grandson of the above mentioned Thomas Addison) owned 109 slaves, with 60 in residence at the main house complex in 1775 (Hurry 1984: 8, 17). An overseer was also in residence in the main house complex in that year (Hurry 1984:16-17).

Little is known concerning occupancy of the Oxon Hill Manor great house complex after 1810, although an 1863 map (Hurry 1984:Figure 8) illustrates several outbuildings. A 1902 Coast Survey Map, provided as a result of the August 14 consultant's conference, depicts what may have been a tenant structure near the location of the 1863 road into the main house complex, but provides no other discernable details concerning outbuildings.

Based on available information it is proper to assume that slaves resided within the study area during at least the 1727 to 1775 period of occupancy. The location and distribution of those slave domiciles are currently unknown, but given the scope of the investigation it is probable that at least some additional historical and archaeological evidence will be found.

Afro-American archaeology began receiving well deserved attention during the 1970s (cf. Ascher and Fairbanks 1971; Fairbanks 1972; Schuyler 1974; Otto 1975; Kelso 1976; Deetz 1977; Drucker and Anthony 1979; Mullins-Moore 1979; and Singleton 1979). That attention has continued into the 1980s, with increasingly more sophisticated research publications (cf. Ferguson 1980; Henry 1980; Wheaton, Friedlander, and Garrow 1983; and Wheaton and Garrow 1984). The Oxon Hill Manor project offers the opportunity to discuss trash disposal patterns, larger artifact patterns, evidence of socio-economic status, and general utilization of space by slaves owned by very wealthy masters.

A prerequisite to testing Hypothesis 3 will be the identification of specific contexts within the site as the products of activities by slaves. Colono Ware ceramics (Ferguson 1980; Henry 1980; Wheaton, Garrow, and Friedlander 1983) were not reported from the previous investigations of Oxon Hill (Epperson 1980; Dent 1983; Hurry 1984). Further, few potential outbuildings have been positively identified to date, and none of those tentatively identified have been positively dated.

If Colono Ware ceramics are absent it will be necessary to identify potential slave generated contexts from study of differential methods of space utilization within the site; evidences of differing socio-economic status levels within the site at the same time; and evidence of differential food preferences within contexts

in distinct sections of the site. The methods that will be used to explore those questions are presented in detail in the Research Methods section.

Somewhat less is known concerning indentured servants and overseers in the archaeological record than is currently known for slaves. Archaeological deposits attributable to an overseer was reported by Otto (1975 and 1977) from a nineteenth century plantation on the Georgia coast. Further, what appears to have been an overseer occupied structure was reported from Yaughan Plantation (Wheaton, Friedlander, and Garrow 1983) from the South Carolina coast. The literature is virtually mute concerning archaeological evidence of indentured servants.

Nothing is currently known concerning occupants of Oxon Hill after 1810, and it is possible that multiple racially and/or socially based groups were not present after that time. The composition of the residents of Oxon Hill Manor in the post-1810 period will, of course, be a priority of the archival research phase of this project.

The null hypothesis in this case would be supported if the study determines that the socio-economic statuses of slaves, overseers, indentured servants or other employees of the pre-eminent family are not, at some level, a reflection of the socio-economic status of the pre-eminent family. For an example, this would be particularly clear if it can be demonstrated that the slaves owned by the Addison family lived at a bare subsistence level of existence, while the Addisons occupied an extremely high socio-economic level.

Hypothesis 3 does not imply in any way that there was socio-economic equality within Oxon Hill, however, only that a "coattail" effect was operative which served to elevate the outward socio-economic indicators for the slaves, indentured servants, and overseers beyond the point that might otherwise be expected because of their station in life. This means that the lifestyles of the slaves, overseers, and indentured servants became additional outward manifestations of the very high socio-economic position enjoyed by the Addisons.

There are a number of steps that must be taken to insure adequate testing of Hypothesis 3:

- The number and nature of the status groups present within Oxon Hill through time must be determined.
- The status level of the pre-eminent family must be demonstrated through the occupation life of Oxon Hill.
- It must be possible to archaeologically distinguish status groups within Oxon Hill through time.
- The status groups observable within Oxon Hill through time must be comparable at some level with similar status groups

from other sites, so that assessments can be made concerning the impact of the socio-economic level of the pre-eminent family at Oxon Hill on lower status groups.

Hypothesis 3 may prove to be more difficult to address than Hypothesis 1 or 2. It is essential, however, to study the impact of lower status groups on the archaeological record recovered from Oxon Hill, so that a balanced view of the site's occupations through time can be achieved.

The fourth hypothesis addresses the position of Oxon Hill Manor in the larger marketing network of the Mid-Atlantic and Southeast during the eighteenth and nineteenth centuries. The extremely high socio-economic position of the Addison family would appear to support the contention that their purchases were not necessarily restricted to items that were readily available and inexpensive. This means that the material culture originating from the Addison occupancy should contain a good cross-section of at least domestic artifacts available on the world market at that time, while materials used and discarded by later residents should reflect a more constricted range of marketing choices. This leads to Hypothesis 4, which states:

HYPOTHESIS 4. Artifacts recovered from contexts attributable to the Addison family will represent a broad range of marketing choices available to wealthy families in the eighteenth century, and the geographic range of origin of goods will be restricted only by import laws operative in that period. Residents of post-1810 Oxon Hill will demonstrate a close dependency of goods from a constricted range of sources, and probably purchased goods funnelled through a nearby marketing center such as Baltimore.

Hypothesis 4 should be testable through application of both historical and archaeological research. Examination of the Addison family papers should help elucidate how the Addison family members made their purchasing choices, and whether they participated in localized marketing networks or ordered their household goods directly from overseas agents. Noel Hume (1976:194-195) cited an example of "...Virginia lawyer and plantation owner Peter Lyons..." who, in 1771 sent instructions to his London agent which stated:

Colo. Snelson & myself have an inclination to taste some good Burgundy & Champaign Wine, and therefore shall be obliged to you to purchase for me two dozen Bottle of each sort the best that can be had in London, and have it carefully packed and sent by the first of your Ships. I have given Captn. Robinson a wine glass as a pattern for two dozen mentioned in the Invoice to be sent me.

It is likely that the Addison family made similar special purchases that will be reflected in their family papers and in the archaeological collections. At any rate, Hypothesis 4 is an important research question to include in this project so that marketing networks can be featured and studied to the degree that important topic justifies.

Study of marketing networks will prove to be a simpler task for the nineteenth century materials than for those dating to the eighteenth. Ceramic marks and glass embossments indicating the origin of specific artifacts became much more common in the nineteenth century (cf. Godden 1964 and Baugher-Perlin 1982:260). This means that the investigation will be less dependent upon archival sources for investigation of marketing networks for the post-Addison occupancy. This is fortunate, for at this time it cannot be confirmed if good documentation exists on the post-1810 residents.

The null hypothesis of Hypothesis 4 would be that no specialized marketing efforts can be demonstrated for the Addison family, and that no focus for purchases of the post-1810 residents can be identified. Substantiation of the null hypothesis would, in this case, force reconsideration of the socio-economic position of the Addison family. This could lead to characterization of the status position they enjoyed as being high in relation to the local social and economic structure, but not in regard to regional or national measurements.

A number of steps should be taken to insure adequate testing of Hypothesis 4. Those include:

- At least some of the purchasing choices made by the Addisons must be demonstrable through study of available archival sources.
- High cost and unusual (in reference to other collections of the period) artifacts must be demonstrated to be present within the artifact collections from contexts attributable to the Addisons.
- The origins of at least some artifacts from post-1810 contexts must be traceable from ceramic marks, glass embossments, or other means.
- Preferably, at least some archival data should be developed concerning the post-1810 inhabitants and their position in the local marketing network.

Investigation of Hypothesis 4 should open a number of research avenues that have not been anticipated in this research design. Certainly, investigation of Hypothesis 4 will lead to drawing inter-site comparisons with sites represented in the available literature, and insure that the position of Oxon Hill Manor within the larger social and economic structures of its period of occupancy will be studied.

Evidence in Area IV was found for prehistoric occupation of the site during the Late Woodland Period. This evidence included recovery of three Mayaone sherds from the buried "A" horizon of Test Unit 5, additional sherds from shovel tests, quartz flakes in shovel tests, and the presence in the "A" horizon of small fragments of charcoal (Hurry 1984). This material appeared to be restricted to the terrace and the terrace edge; prehistoric material was not present in units excavated downslope to the north. As the apparent area of prehistoric material was covered by fill early in the 1700s, this Late Woodland occupation may be relatively intact. As such, it represents an exceptional opportunity to investigate a relatively unknown aspect of Late Woodland cultural systems in the region.

While a number of Late Woodland sites are known from the region (Egloff and Potter 1982; Wanser 1982; Steponaitis 1980; McNett and Gardner 1974), few small sites similar to the probable occupation at Oxon Hill have been investigated (Waselkov 1982). Furthermore, upland sites containing Mayaone ceramics are rare; it is unknown how small occupations in upland settings fit into the Late Woodland settlement-subsistence system. Custer and Wallace (1982) have analyzed settlement patterns of prehistoric groups in the adjacent Piedmont Uplands of the Mid-Atlantic region and have related these patterns to the distribution of wild plant and animal resources (and lithic materials). For the Late Woodland Period in the Piedmont, these authors see a continuation of basic patterns begun in the Archaic "with a few subtle differences" (Custer and Wallace 1982:159). Upland processing sites (hunting and butchering camps) remain basically similar to those of previous periods, but base camps/villages in lowland (valley floor) areas are better defined; they are usually somewhat higher (on better drained soils) and are slightly farther away from the poorly drained flood plain settings common to earlier Woodland and Archaic base camps. Custer and Wallace speculate that these Late Woodland base camps/villages may be more permanent than their analogs from previous periods, and that the developing use of agriculture may be involved in this apparent increasing sedentism. They thus postulate that the Late Woodland settlement pattern in the Piedmont Uplands may correspond to Binford's (1980) characterization of a system using "logistical procurement" of resources by specialized (hunting) groups who would then bring the resources back to a centralized location (base camp/village).

It is not difficult to apply such a model to Late Woodland groups in the Coastal Plain, especially to groups in the nearby Fall Line/High Coastal Plain of the Oxon Hill vicinity. Under such an application of the "Custer and Wallace model", the Late Woodland occupation at Oxon Hill may represent a temporarily occupied resource extraction camp, presumably a hunting camp or perhaps a wild plant collecting station. This application of the above model has some appeal in that it is reasonable to expect Coastal Plain

Late Woodland peoples (such as Mayaone) to employ "logistical procurement" of nearby upland area resources and leave evidence of camps occupied by these procurement groups (e.g., hunting parties, nut collection task groups).

There are problems with application of this model to the prehistoric occupation at Oxon Hill, however. The probable "base camp" for procurement groups in the Oxon Hill vicinity is the Accokeek Creek site (Stephenson and Ferguson 1963) located less than 10 miles south of Oxon Hill on the Potomac River. This site represents a major village spanning probably the entire Late Woodland Period, and an apparent center for the development of Mayaone ceramics. It is almost certain that the Oxon Hill prehistoric occupation was closely related to the Accokeek Creek site.

Logistical procurement group camps are most commonly located at distances representing more than one day's travel from a base camp/village. It does not appear reasonable that a hunting party or other procurement task group would establish a substantial (archaeologically visible) camp less than one day's travel from the base village. The Accokeek Creek site is at most only a few hours travel from Oxon Hill, and it is thus difficult to predict interpretation of Oxon Hill as a logistical procurement camp.

Binford (1980) proposes an additional resource procurement system that may be applied to the Oxon Hill Late Woodland occupation and that is discussed as an operational system for earlier Woodland and Archaic groups in the Piedmont Uplands by Custer and Wallace (1982). This system is known as "tethered nomadism"; it postulates that archaeologically visible sites close to central bases (villages) represent continual revisiting of selected very favorable localities by foraging groups that return to the base camp each day. Such sites do not represent overnight camps and become archaeologically visible only through long-term recurrent use.

A third hypothesis for placement of the Oxon Hill occupation within a Late Woodland settlement subsistence system might be that Oxon Hill represents an isolated farmstead or small hamlet closely tied to the Accokeek Creek center. While little is known concerning the function of Late Woodland sites away from such centers as the Accokeek Creek site in the Lower Potomac Valley, it is reasonable to postulate that the numerous small sites known for flood plain settings represent small farmsteads/hamlets rather than procurement camps (especially considering the fact that their flood plain setting would not produce resources distinctive from those surrounding a major village such as Accokeek Creek). Further, the pattern of scattered small farmsteads around a central village is a common feature of late prehistoric groups in the eastern United States. It is certainly possible that such farmsteads could exist on upland terraces. Soils in such upland areas are rich once the

forest is cleared, and upland areas have benefits in that they are usually better drained. Further, upland terraces have slightly longer growing seasons because air movement in late Fall is better (and cooler air settles in the valleys), inhibiting frost development on plants.

This third potential placement within a Late Woodland settlement subsistence system for the Oxon Hill prehistoric occupation is expressed below as a specific hypothesis to be tested as part of this project.

HYPOTHESIS 5. The Late Woodland in the Lower Potomac River Valley is characterized by a settlement subsistence system involving a central village and a series of surrounding farmsteads/hamlets. The prehistoric occupation at Oxon Hill represents such a farmstead or small hamlet.

If the Oxon Hill prehistoric component does represent such a farmstead, we would expect archaeological evidence of a relatively substantial occupation. This would include evidence of structures, storage/refuse pits, hearths, and a variety of lithic tools. Tool types present and artifact discard patterns should indicate a variety of activities performed. Floral and faunal remains should be present and should indicate a variety of resources used/consumed. Floral and faunal remains should also indicate occupation in more than one season. In addition, stylistic attributes of ceramics and other artifacts should show close resemblance of Oxon Hill materials to those of the Accokeek Creek site (although this should be true under the alternative procurement camp hypotheses).

Alternative hypotheses would state that the Oxon Hill prehistoric component represents a procurement group camp or a continually revisited foraging locality. Archaeological deposits expected from these kinds of occupations would be strikingly different from that expected under Hypothesis 5. Subsurface features other than a limited number of hearths would not be expected, and the number and variety of tools and other artifacts should be very low, indicating few activities performed at the site. Site size should be small, except that a revisited forager site might be expected to be characterized by a number of overlapping occupations which could produce a larger artifact distribution. Even in that case, artifact variety should be very low, and tools present should be tied to specialized tasks associated with procurement of specific resources.

The apparent excellent preservation within Area IV of the prehistoric component should allow recovery of high quality data which will allow definitive statements as to the character of the Late Woodland occupation. As Hypothesis 5 presents clearly different test implications than competing alternative hypotheses,

we should be able to designate site function without uncertainty and thus contribute in a significant way to the understanding of Late Woodland settlement patterns in the area. Should Hypothesis 5 be supported by the archaeological data, substantive information concerning the diet and technology of the occupants of the site will be present, along with data delineating their relationship to the Accokeek Creek site immediately to the south.

The research questions posed for the Oxon Hill Manor site are based on our current knowledge of the site taken from previous survey and testing projects (Epperson 1980; Dent 1983; and Hurry 1984). Oxon Hill Manor is an extremely complex archaeological resource, and it appears likely that at least some perceptions concerning the site will change as the full-scale excavation proceeds. For that reason, it is essential that the research questions posed for Oxon Hill be considered to be flexible and open-ended, so that additional lines of research inquiry can be added if necessary as the project proceeds. Thus the research questions presented above should be considered as broad lines of inquiry that will be used to order the research effort, while they should not be considered the only questions that may be addressed by the Oxon Hill data.

Archival Research Methods

Research by Hurry (1984) conducted on Oxon Hill Manor has revealed a number of published, manuscript, and archival sources that are available concerning the history of that site. Information gathered at the Pre-Proposal Conference indicated, however, that the historical/archival research conducted on the Oxon Hill Manor Site was not exhaustive, and that a well designed and conducted archival research project should yield data pertinent to all periods of the site's occupancy.

The initial step in the archival research will be to assemble all published and unpublished manuscripts that deal with the project area. This will be done by consulting the Harvard Guide to American History, Writings in American History, and the computerized listing at the main reading room in the Library of Congress. All available historical maps will also be assembled. This will involve research at the Library of Congress and the National Archives in Washington, the holdings of the Maryland Historical Trust, and records of Prince Georges County, Maryland.

Information gained at the Pre-Proposal Conference indicates that at least some Addison family papers that date to occupancy of Oxon Hill Manor have survived, and are on file with the Maryland Historical Trust. Examination of those papers for evidence concerning the perceived social and economic position of the Addison family, as well as insights into the physical structure and lifestyle at Oxon Hill Manor will receive first priority on this project. The holdings of the Maryland Historical Trust will further be researched to determine if information concerning the Berry family - who owned Oxon Hill after 1810 - can be found. Special attention will be given to try to locate diaries, ledgers, daybooks, and account books pertinent to the operation of Oxon Hill Manor.

County records of Prince Georges County, Maryland, should provide a large amount of information about the total history of occupation on the site. Research conducted by Hurry (1984:69-70) revealed probate inventories for Thomas Addison (1727), John Addison (1765), and Thomas Addison (1775), as well as deed records pertinent to Oxon Hill Manor. The only post-1810 archival record noted in the Hurry (1984:17) report dealt with placement of Thomas Berry's land in the hands of trustees to satisfy his debts in 1878. It must be assumed that additional records, including Zachariah Berry's probate inventory, will be found in the Prince Georges County records during the proposed archival research. Research in the Prince Georges County Records will center on locating land and plat records, tax records, wills, probate records, inventories and other materials pertinent to better understanding the historic occupancy of Oxon Hill Manor.

Census data should be particularly useful in determining the nature

of occupation of Oxon Hill Manor from 1790 to 1890. Census records were progressively more detailed through the nineteenth century, and if all else fails it may be possible to identify specific post-1810 occupants of Oxon Hill Manor through careful analysis of the census records.

An additional potential source of historical information is local newspaper files. It is generally difficult to find specific sources concerning study properties in newspaper files as they normally require a great deal of effort for small return. Every effort will, however, be made to search local newspaper files for information concerning the Oxon Hill Manor residents.

As referenced in the preceding research questions section, historical research will be pertinent to addressing every historic research question formulated for this project. The historical research will, therefore, be conducted as a critical line of inquiry that must be rigorously pursued in order to insure the success of the overall project.

Field Excavation And Recordation Methods

The field operations to be conducted on the Oxon Hill Manor Site have been clearly stated in the Resume For Consultant Services, and summarized in the Scope of Services Section of this proposal. Those operations will not be discussed in this section, and instead the standard excavation methods to be employed on the site will be presented.

A grid system, employing the metric system of measurement, has been established on the site (Hurry 1984:28), and the results of both reported testing projects have been described in reference to that grid. The same grid system will be employed during the proposed excavation project to insure comparability between all of the investigations on the site. Precise vertical and horizontal control of the site excavations will be maintained in reference to the existing grid system. The metric system of measurement will be maintained during the proposed excavations to insure data comparability.

The basic excavation units to be employed on this project will be one meter control squares. One meter units will be excavated, with use of appropriate control balks (to insure maximum vertical control over the excavations), following the methodology described in this section.

Vertical excavation of units will follow natural stratigraphy where possible, and a maximum of 10 centimeter vertical cuts where natural stratigraphy is not evident. Further, natural strata more than 10 centimeters thick will be excavated in increments not to exceed 10 centimeters so as to insure maximum vertical control over

the excavated areas.

Soil color in all cases will be described in terms of Munsell terminology, and soils will further be described in terms of subjective color and texture. Every attempt will be made to insure that soil descriptions are used that will have meaning in the reporting phase, and that similar soils across the site will be recognizable.

All soils manually excavated within the site will be screened through quarter inch mesh screen, with the exception of those feature soils screened through window screen or retained for separation by aqueous flotation. That measure insures that the recovered materials will indeed be representative of site content. Water screening will be employed if a suitable water source can be secured within the site, otherwise dry screening will be used for the majority of the soils.

If possible, a water line will be installed to the site area to provide for water screening. If this can be done, a water screening area will be set up, with excavated deposits brought in by wheelbarrow. Provisions will be made to insure that water screen sediment will be trapped before transport to any existing stream or other protected source. If a water line can be installed, a flotation device will be set up in the screening area to process soil samples from features and excavation units. This device will be set up at the Field Laboratory should water not be available on the site.

All features encountered within the site will be excavated in half or quarter sections dependent upon the size of the feature. Features will be excavated following natural stratigraphy, or by 10 centimeter increments if natural stratigraphy is not evident. If natural strata exceed 10 centimeters, those strata will be removed in a maximum of 10 centimeter levels. The fill of selected features will be screened through window screen, and two liters of soil from each level of each feature (more in the case of large features) will be retained for aqueous flotation. Separation of soil by flotation will be conducted on-site, after appropriate preparation of the sample.

Plan and section maps will be prepared to a standard scale for all excavation units and features. Each unit and feature will be completely photo documented in both black and white prints and color slides. A professional photographer has been included on the project team to insure high quality photo documentation, and he will have a range of 35mm and large format cameras, with a wide selection of lenses, available to insure adequate documentation of the excavation. The professional photographer will be an important member of the field crew; the complexity and importance of this project merits professional attention to this critical project function.

All material excavated on this project will be carefully recorded and maintained by excavation unit, level, and feature and level. Standardized recordation forms will be employed to insure consistency of data recovery. Further, a master bag list will be maintained on site, and each bag of artifacts will be verified by provenience and checked into the field laboratory on a daily basis. This means that there will be several control points to insure inventory control over the materials extracted from the site. First, one crew chief level staff member will be designated to assign bag numbers in the field and record each bag provenience on a master bag list. Second, the crew chief responsible for the excavation unit will be responsible for insuring that all bags are accurately recorded within the system. Third, the Field Director and Laboratory Director will be responsible for checking each bag of material into the laboratory, and checking off each bag of materials against the bag list. This long discussion may appear to be belaboring a simple excavation task, but inventory control on a project of this magnitude is crucial to the ultimate success of the project.

The day-to-day operation of the site will be fully documented in field notes prepared by the individual crew chiefs, and in field notes kept by the Field Director. A major responsibility of the Field Director will be to review the notes prepared by the crew chiefs, and attest to their accuracy. The Principal Investigator will audit the project field notes on a weekly basis so that omissions or inconsistencies can be corrected.

The presence of a filled well within one of the areas to be excavated dictates that special preparations be taken to insure safe and systematic excavation of that feature. Noel Hume (1969:144-157) has pointed out the dangers associated with well excavations, and it is fair to state that wells, particularly deep ones, are potentially the most dangerous features that can be encountered on an archaeological site.

A critical first step in the excavation of the Oxon Hill well will be preparation of a comprehensive safety plan, as well as design of an appropriate shoring system for the well shaft. Design of the shoring system will be the responsibility of a civil engineer, who will be retained for that purpose. Garrow & Associates, Inc. retains the right to suspend all manual excavation of the well if it is determined that continuance of the excavation will represent a clear danger to the safety of excavation staff. It is anticipated that the shoring system that will be used will either be a wooden frame shoring system or a metal sliding liner that can be used to prevent shaft collapse.

In the event the well is determined to be too dangerous for manual excavation, an alternative excavation system will be employed. Graffam (1981:22) successfully used a 3 foot diameter screw auger

to excavate a seventeenth century well shaft that was determined to be unsafe for manual excavation. The technique he used involved removal of well fill in 6 inch levels with the screw auger, with recovery of soil and artifacts from the screw thread of the auger for screening and artifact separation. That method apparently did not result in undue damage to the artifacts, and allowed excavation of an otherwise unsafe well shaft. A version of the method described by Graffam will be employed on the Oxon Hill Manor well should manual excavation of the shaft prove to be undesirable because of safety considerations.

The current project plan calls for initiation of the field phase in January, 1985. This means that the field phase will be conducted partially during the winter months, and special provisions are proposed to insure that the excavation can be conducted efficiently without the excavation units being damaged by freezing.

There are a number of steps that can be taken to insure that field work can be effectively conducted in the Mid-Atlantic during the winter months. Garrow & Associates, Inc.'s staff members conducted a major excavation in Washington, D.C. (Garrow 1982) during February, 1980, under extremely adverse weather conditions. Relatively crude, but effective measures were taken in that case to prevent freezing of the excavation units. Insulation material removed from nearby buildings scheduled for demolition was placed in each excavation unit at the end of the each work day, and covered with black plastic. None of the excavation units froze overnight, despite temperatures below 10 degree fahrenheit on several days. A more effective material that will be substituted for insulation on this project will be hay covered by black plastic. Hay mixed with moisture begins a bacterial action that generates heat. Hay covered with black plastic was used with excellent results on the 175 Water Street Project in New York City, which was conducted during the winter of 1982.

Additional methods that will be used to combat the effects of adverse weather on the Oxon Hill Project will be the use of simple framed structures covered with plastic and heated with commercial, forced air kerosene heaters. Shelters and heaters will be adequate to protect the site and the crew during the coldest weather, and will insure that a high level of productivity will be maintained.

Further, an office trailer will be maintained on site, both to shelter the crew as necessary, and to provide a secure temporary repository for equipment and artifacts. An electrical line will be run to the trailer to insure that a heater can be maintained within the trailer. The trailer will also provide a clean work space for the field director and crew chiefs as necessary.

The field methods proposed for the Oxon Hill Manor Project should insure a high level of crew productivity and recovery of consistent data sets. The degree of organization reflected in this

methodological statement should insure that this complex project is thoroughly and professionally conducted.

Floral And Faunal Recovery Methods

Methods of floral and faunal recovery are of the utmost importance when attempting to reconstruct dietary patterns. An accurate analysis and interpretation of dietary patterns depends upon the efficiency and effectiveness of the recovery method. Inadequate methods usually result in a bias toward large bones, concomitantly resulting in a loss or skewed representation of small scale remains (Casteel 1972). A review of faunal studies at historic sites (Singer 1982:23-28) has shown that this form of data bias has been the primary cause of erroneously interpreting foodways patterns. Struever (1968) found that the use of conventional one quarter inch mesh screens resulted in a loss of more than 90% of plant materials, while water separation nearly doubled the quantity of fish bone, greatly altering the species frequency and size representation in Struever's samples. In a study estimating bone loss Singer (1984a) had noted that 75% of all herring size fish bone passed through standard quarter inch mesh screen. Such a loss, if gone undetected, would result in an erroneous impression of consumption patterns.

There are two methods other than simple dry or water screening by which small and/or light material remains may be recovered, water separation and chemical flotation. The latter method contains inherent problems; the chemical solution cannot be too acidic, basic, toxic, flammable, or damaging to organic materials. In addition, the process of weighing and adjusting mixtures is time consuming, and chemical solutions are costly. It is therefore proposed that the recovery of small scale remains be undertaken using the water separation method. Water separation can be conducted in a quicker and more efficient manner. This sorting method is not harmful to organic materials, and is relatively inexpensive.

Although one quarter inch mesh screen has usually been the standard screen size used for data recovery, it is often times necessary to supplement or even replace this with finer mesh, to prevent the loss of small floral and faunal remains. The optimal screen size by which data recovery can be maximized is window screen. Artifact bearing soils can be water sorted through window mesh; the quantity of materials recovered can be increased by 75% (Singer 1984a) to 90% (Struever 1968). All feature fill suitable for floral and/or faunal recovery on this project will, at minimum, be water screened (assuming the availability of a steady water source) through window screen. Window screen may not be fine enough to capture very small seeds, and for that reason a sampling procedure with finer recovery mesh will be used. Two liter soil samples shall be taken from each level within each feature and processed in an aqueous solution through a flotation drum using bridal veil as a catch-basin for the

materials. Large features may be subject to more than one soil sample per level.

Area I contains a filled well, presenting a potentially excellent floral/faunal preservation situation. Filled wells have often been found to contain extensive collections of faunal materials (Noel Hume 1969; 1975; Barber 1976; Graffam 1982). The recovery methods outlined above will insure that all available faunal and a representative sample of floral materials are recovered. In this way a full and accurate array of dietary components will be available for study.

Area IV (landscaped garden remains) has a high potential for indicating gardening activities, and the purpose for which the garden was utilized (kitchen, herbal, ornamental, or landscape). Vegetable and fruit seeds are indicative of kitchen gardens, various weeds--herbal gardens, flower seeds--ornamental gardens, and wood/root remains--landscape gardens (Evelyn 1674; Culpeper 1653; Taylor 1982). Special soil samples and palynological samples will be recovered from the area of the formal garden during the excavation. Identification of floral remains will be undertaken with the use of standardized methods of floral analysis and analysis of pollen samples.

Artifact Analysis Methods

The schedule required for completion of the total Oxon Hill Manor Project dictates that a complete field laboratory be established to receive and process artifacts concurrently with the fieldwork. It is anticipated that the field laboratory will be a 3,500 to 4,000 square foot facility that will be totally dedicated to the Oxon Hill Manor Project. This facility will be maintained in addition to the office trailer to be placed on-site. Upon completion of the fieldwork the field laboratory will be closed, and all project materials will be returned to Garrow & Associates, Inc.'s Atlanta facility for completion of analysis and the project reporting phase. The paragraphs that follow describe the principles that will be used to guide the laboratory analysis, as well as the specific analysis techniques that will be employed. The faunal and floral analysis techniques to be used on this project are discussed in a separate section that follows the discussion presented below.

All artifacts recovered during the excavation will be returned to the laboratory for cleaning and any needed stabilization. No artifacts, regardless of age or condition, will be discarded in the field. The initial laboratory step will be to inventory all artifact bags against the field bag list to insure that all excavated materials are indeed present in the laboratory. Following that step, the artifacts will be cleaned using techniques appropriate to the nature and condition of the materials. At that point, any artifacts that require special conservation steps (i.e., leather, bone, floral material, corroded metal items) will be removed from the other artifacts within the bag, and set aside for conservation. Conservation will begin immediately on such items, so as to insure that particularly fragile items are not lost before they can be processed. All materials that enter conservation procedures will be photographed before conservation begins, and at critical points in the conservation process as required. At that point the artifacts will be catalogued under the system and following the procedures established by the Maryland Division of Archeology.

As an extension of the cataloging process, all artifacts will be computer coded by provenience and specific artifact codes. The codes will then be entered in a dBase II program, on an Apple IIe computer. Use of a microcomputer and the dBase II program offers the advantage that any staff member can be trained to input data, and computer specialists will not be needed for that function. A disadvantage of microcomputers is that they have limited data disk storage space, and in the past it has been necessary to enter data on a number of storage disks that then would have to be individually searched during analysis. The limited storage disk problem will be overcome for this project by using a 10 megabyte hard disk storage system that will be added to Garrow & Associates, Inc.'s Apple IIe hardware. This is a relatively inexpensive and efficient solution to the storage capacity problem and will greatly

facilitate the analysis stage. The use of computer analyses will facilitate the preparation of SYMAPs depicting the artifact distributions within the site by specific artifact classes and major dateable periods. Garrow & Associates, Inc.'s staff are currently reprogramming the SYMAP program from Fortran to Basic, and the SYMAPs for this project will be generated on an Apple IIe with a dot matrix printer.

The steps described to this point will be carried out on all artifacts recovered during the Oxon Hill fieldwork. This will provide a project data base, from which other analysis steps can be conducted. After data entry, it will be necessary to date each provenience as the first step in an evaluative system that will identify which proveniences are amenable to application of sophisticated analysis techniques.

There are a number of methods that can be used to affix deposition dates for a provenience. One system that will be used is the terminus post quem and terminus ante quem system described by Noel Hume (1969:69-70). This system involves determining the youngest and oldest artifacts within a given provenience, which provides a hypothetical deposition date range.

A second dating system, which will be extensively used on this project, is the mean ceramic dating system described by South (1977). The mean ceramic dating system employs a regression formula applied to the manufacturing date ranges for ceramics from the provenience under study. The South mean ceramic dating formula does not apply to contexts that date after the 1820s, but ceramic popularity date ranges devised by Garrow (1982:230-241) extend the utility of mean ceramic dating to approximately 1860. It is hoped that data gained from the Oxon Hill Manor Project can be used to extend the Garrow mean ceramic data scheme to the late nineteenth century, and to also eliminate several inconsistencies that have been noted in that dating system. The mean ceramic dating scheme will be supplemented by dating ceramic maker's marks (cf. Godden 1964; Gates and Omerod 1982) where they are available.

Techniques of manufacture and maker's marks and other embossments on glass bottles have utility for dating archaeological contexts (McKearin and McKearin 1941, 1950; McKearin and Wilson 1978; Noel Hume 1976b; Hunter 1950; Sauzay 1869; and Wilson 1972). Glass dating techniques generally have more utility for the nineteenth than eighteenth century, but eighteenth century bottles can be dated through studying the configuration of the kick-up on the base (Noel Hume 1976). Study of the finish of eighteenth century bottles can provide dating keys, and, of course, fairly exact manufacturing dates can be determined if bottles with personalized, dated seals are present. Nineteenth century bottle glass presents an array of dating landmarks. Technology of manufacture changed fairly rapidly through the nineteenth century (Lorrain 1968; Munsey 1970; Switzer 1974), and manufacturing technology is thus an

excellent dating tool (Cheney 1980). Further, embossed bottles became popular during the nineteenth century (Baughner-Perlin 1982), and embossments can be used to develop fairly tight dates. Finally, by the last quarter of the nineteenth century maker's marks were carried on a number of bottles, and these can be used to generate dates in much the same way ceramic maker's marks are used (cf. Toulouse 1971).

Pipestem dating (Harrington 1954; Binford 1961) is an additional technique that should prove to have value on the Oxon Hill Manor Project. That technique is valid in Pre-Revolutionary War contexts, but cannot be accurately applied after that date.

A number of other artifact types may prove to be suitable for dating. A conspicuous example is coins, although coin dates have to be viewed critically as they were items that tended to be curated and used for long time spans.

The artifact pattern model scheme, as devised by South (1977) and revised by Garrow (1982) will be used as the basic formatting scheme for all artifacts. This scheme is a rational approach for the organization of artifacts on a provenience to provenience level, or all the way up to total site contents. The artifact pattern model scheme has utility for investigating Hypothesis 1 in the project research design, as comparisons of artifact patterns derived from various points within the site can prove useful in discerning different functions pursued within those sectors (cf. Garrow 1982; Klein and Garrow 1983; Henry and Garrow 1983). Further, artifact pattern studies can reflect cultural level differences if they exist (Wheaton, Friedlander, and Garrow 1983), and may prove helpful in sorting out areas occupied by Afro-American slaves (see Hypothesis 3) from other occupation areas within the site. A final, and compelling reason to use the artifact pattern model scheme is that it provides a good format within which to present the contents of the site, and can lead to cross-comparisons with other sites formatted in that manner.

The artifact pattern model scheme is considered to be a starting, versus an end point for this analysis. Analyses that extend no further than artifact pattern model analysis cannot generate the sophisticated data needed to address the project research design. At the same time, not all proveniences encountered within a site are amenable to more sophisticated analysis, which means that a sorting mechanism will be required at this point to determine which contexts will be employed for more exacting analysis attention.

—The place of original use and discard of the artifacts contained in
—the features and middens within Oxon Hill Manor must be determined
—before finely drawn research hypotheses can be tested. It is
—anticipated that the site will contain undisturbed features and
—middens; features and middens generated from site occupation that
—were disturbed by later occupation and use; and fill that contains

artifacts and was transported to the site from an outside source to be used for landscaping or other purposes. This means that artifacts found in the formal garden may well have been originally used and discarded within a low status occupation outside of Oxon Hill Manor, and incorporation of those artifacts among the contexts used to test the socio-economic status of the Addison family would result in misleading and contradictory data sets. The same factor could be operative for virtually any feature or midden encountered on the site. A good example of this would be the fill history of a hypothetical privy within the site. It is possible that a privy or privies within the site received primary trash deposition for a period after it was abandoned and before the feature was completely filled. Final filling of the privy could then have occurred in a single interval using fill material brought in from outside of the site. This would mean that part of the artifact content of the privy would be germane to pursuit of the research design, while the remainder of the artifact content has nothing to do with the residents of the site. A system for evaluating all encountered features and middens and sorting them into site-specific and non-site-specific categories thus becomes critical.

Each context recovered from the site will be studied during the analysis in an attempt to identify whether the contents were generated as products of direct occupation of the site, or as the result of transportation as fill from an outside source. The methods to be employed to evaluate the site contexts were developed for application on urban archaeological projects (Garrow 1984), and involve direct field observation; quantified cross-mend analysis of ceramics and glass; ceramic set analysis; standard observations during faunal analysis; and ceramic and glass percentage of completeness analysis. Each of the techniques that will be used to evaluate the site contexts is also a necessary step in the integrative analyses of the site collections, which means that the evaluative process will not divert critical analysis time from pursuit of the research design.

Application of the context evaluation procedure will result in sorting the site contexts into site-specific (generated from within the site) and non-site-specific analysis units. Every encountered context will be analyzed to some level during this project, but it is anticipated that transported fill will prove to be of value in dating site stratigraphic units, while finer social and economic questions will be addressed through sophisticated analysis of site-specific contexts. Separation of this type is critical, as the origin of each artifact collection from each context must be understood before it can be incorporated into the larger research sample.

Each analysis step that will be used to evaluate the Oxon Hill contexts is a necessary step towards meeting analysis goals needed to address the project research design. Quantified cross-mend analysis was developed by Garrow (1982) on the Washington, D.C.

Civic Center Site to test the origin and nature of what turned out to be a mid-nineteenth century single family trash dump. Under that method, the ceramics and glass within a context are mended, and the cross-mends are charted to determine vertical and horizontal relationships within the context. Extension of the technique over several contexts yields data on how those contexts are interrelated, and helps to determine if a particular set of contexts constitute a single study universe. Study of quantified cross-mends yields direct information on the deposition of a context, as single-incident fill deposits will easily be demonstrated by charting the cross-mends. Cross-mend studies have been used for characterizing contexts in historical archaeology on a rather routine basis (cf. Foss, Garrow and Hurry 1979), but quantification of cross-mends makes it possible to quantify the degree of mixture within or among contexts, and thus formulate a more meaningful picture of what particular contexts mean in reference to other contexts.

2. ★ A second technique that is useful in evaluating the nature of a context or series of contexts is percentage of ceramic and glass vessel completeness (Klein and Garrow 1983). It is desirable to conduct this analysis prior to any analysis steps that deal with ceramics and glass at the vessel level in order to better understand the nature of the study sample. This technique can be used to study the origin of artifacts within contexts as well, as it can be assumed that the lower the average percentage of completeness of ceramic and glass vessels the greater the chance that the context was transported fill. This is not a particularly useful technique for application to midden deposits that are only partially sampled in excavation.

Ceramic set analysis is an additional technique that can be used to help determine the origin of the artifacts within a particular context. Ceramic sets were available to only the wealthiest families prior to the nineteenth century (Garrow 1982:107), but became less expensive and more widely available by about 1840 (Miller 1974). Large and elaborate ceramic sets were routinely offered in mail order catalogues by the late nineteenth century (Henry and Garrow 1983:312), and presumably were relatively less expensive than matched sets in earlier periods. Ceramic set analysis is still in a formative stage of development, but was used by Garrow (1982:107-115) on the Washington Civic Center Site to confirm the single family nature of a mid-nineteenth century dump site on that project. The applications of this technique to Oxon Hill Manor would appear to be fairly broad. Hypothesis 2 presupposes a very high socio-economic ranking for the eighteenth century residents of Oxon Hill. It is not known at this time if they were sufficiently wealthy to support acquisition and use of matched ceramic sets, but the presence of eighteenth century ceramic sets would be a clear support statement for the presumably high socio-economic ranking of those residents. Further, if matched sets are present, it should be possible to track the

individual components of those sets through the site, and thus learn more about the nature of individual site contexts and distributions of artifacts within the site as a whole. Ceramic set analysis will not be restricted to the eighteenth century contexts within the site. Presence or absence of ceramic sets within the nineteenth century contexts will also provide rough data concerning the socio-economic positions of those residents, as well as a mechanism for assessing and linking contexts across the site. At the least, ceramic set analysis should prove valuable for delineating specific activity areas within the site.

A series of standardized observations concerning bone condition (Klein and Garrow 1983) will also be used to help determine the nature and origin of specific site contexts. Faunal analysis will be discussed more completely in the section which follows, but it is sufficient to state at this point that different original deposition environments affect the physical condition of bone. As an example, it is expected that bone deposited directly into a privy would not exhibit edge abrasion from soil creep. Conversely, bone deposited and then redeposited as fill can be expected to exhibit more edge abrasion, surface peeling, fungus pitting, cracking, splitting, and overall breakage than bone left in its original place of deposition and rapidly encapsulated within a midden.

There are a number of analysis techniques that will be applied to the site collections in addition to those outlined above. The Miller (1980) ceramic economic scaling technique is a valuable tool for assigning relative original purchase costs for ceramic assemblages, which has a direct bearing of the economic (and presumably social) status of the individuals under study. The Miller technique is rapidly becoming a standard analysis tool within archaeology (Garrow 1982; Klein and Garrow 1983), and provides excellent insights into ceramic collections dating to the first half of the nineteenth century. The Miller technique has recently been adapted by Henry (Henry and Garrow 1983) for late nineteenth and early twentieth century contexts, but as yet the technique cannot be applied to contexts that predate 1810. The Miller ceramic economic scaling technique will be used on appropriate contexts during the analysis phase of this project.

An additional ceramic analysis technique that will be employed on this project is termed the "Wise Analysis" (1976). The Wise Analysis was developed on the Delaware Statehouse Excavation, and as yet has not been adequately tested on eighteenth century sites. The underlying assumption of the Wise Analysis is that low cost utilitarian ceramics (i.e. redwares) will be found in higher proportions on sites occupied by persons of lower socio-economic status, while the inverse will be true on sites occupied by persons of higher socio-economic status. The Wise Analysis is expressed in terms of two "status indices" which are formulaic expressions of refined versus coarse wares and porcelain versus other refined

wares. The formulae employ sherd counts, and will be easy to calculate as a sorting function of the dBase II program. The Wise Analysis was conducted on the Wilmington Boulevard Project (Klein and Garrow 1983:189-190), and failed to yield consistent results. The failure of the Wise Analysis in that case may have been due to the fact that the Wilmington contexts dated to the nineteenth century, and the technique may indeed be applicable (at a crude level at the least) on eighteenth century sites. If the technique is applicable it should prove valuable in discriminating areas of the site inhabited by different status groups, and aid in defining both socio-economics and racial/ethnic/social groupings within Oxon Hill Manor.

Analysis of glass table wares will also offer insights into the socio-economic status of site residents through time. Lead glass appears to have been more expensive than lime-soda-potash glass produced during the same period. The percentage of lead versus lime-soda-potash glass in a tableware collection thus may provide insights into the purchasing power of particular residents. A fast, cost-efficient method of discriminating lead glass is through the use of an ultraviolet light (Geismar 1983:317), which turns lead glass a distinctive color (only until the ultraviolet light is removed). Further, decorative techniques such as wheel engraving, enamelling, and air twist stems (Noel Hume 1976) were relatively expensive, and should reflect higher socio-economic status where they occur. An additional status measure that may be present at Oxon Hill is personalized wine seals on bottles. Personalized seals are known from Colonial sites occupied by individuals of fairly high socio-economic status (Noel Hume 1976), and should be present during in the earlier Oxon Hill contexts.

Prehistoric artifacts recovered at Oxon Hill will be initially processed in the same manner as historic artifacts. Inventory control by provenience and bag number will be maintained, and artifacts will be cleaned and conserved as appropriate. Cataloging will be performed under the system established by the Maryland Division of Archeology, and data will be entered into a dBase II management program for easy retrieval and manipulation.

Lithic artifacts will be sorted by established tool types in common use in the Mid-Atlantic region. Projectile points will be typed into temporally diagnostic categories where possible. Ceramics will also be classified by types known for the region; for the Late Woodland, we expect that ceramics found at Oxon Hill will be readily classifiable. To insure correct classification, we will compare Oxon Hill collections with others known from the region and housed at various repositories. Lithic debitage will be sorted by three major categories, cortical flakes, interior flakes, and shatter.

Several analyses will be carried out using prehistoric artifacts. Proportions of the various tool types present will be studied as an

indicator of the number and variety of tasks performed at the site. Macroscopic (not microscopic) examination of tool edges will be conducted to further establish tool use and function (and activities performed). Although we expect quartz to be the major lithic raw material at the site, debitage as well as finished tools will be sorted by material to evaluate the nature of lithic procurement decisions of the site's occupants. Debitage will be analyzed by type so that we can characterize the extent and pattern of lithic tool manufacture that occurred at the site. Ceramic analysis will focus primarily on chronological issues, although manufacturing techniques will be noted to distinguish any forms unusual to the project region for the occupational period of the site.

Radiocarbon analysis will be performed as appropriate using carbon recovered from well documented contexts. Thermoluminescence dating of ceramic artifacts will also be carried out as appropriate. An important data category will be floral and faunal remains, both macroscopic specimens recovered in excavation and screening and very small specimens recovered during flotation. Faunal and floral remains should be very important in testing the site function hypothesis, providing data on diet, seasonality of occupation, and perhaps the nature of the environment and climate at the time of site use.

Patterns of artifact distribution at the site will also be studied in an attempt to define tool kits and investigate the types of activities performed at the site. Artifact distribution patterns may also allow inferences concerning community layout, and may assist in identifying possible multiple occupations. We expect that artifact distribution studies will prove to have much utility if the prehistoric component is indeed undisturbed as indicated by the testing in Area IV. Artifact distribution within Area IV, and within any excavation blocks advanced into the buried "A" horizon will be investigated using computer assisted density mapping similar to that provided by SYMAP.

Finally, artifact data will be closely compared with information from features and soil development to provide a more complete understanding of site function and chronology. Feature function, location, and construction technology should greatly assist in interpretation of the meaning of artifact proportions and distribution patterns at the site.

Faunal and Floral Analysis Methods

The faunal and floral analyses to be conducted on the Oxon Hill collections is viewed as a critical project function. The section below discusses the analysis steps that will be taken, and how the individual analysis methods will contribute data to testing the

project Research Design.

A critical step in the faunal analysis will be to establish the minimum number of individuals present in the sample by specie (Grayson 1978; Casteel 1977). Deriving minimum number of individuals must be undertaken by critical examination of the presence and/or absence of skeletal elements and identifiable cuts of meat. For example, the presence of ten left cow femurs is not indicative of ten individuals; this is merely evidence that ten identical cuts of meat were acquired. This distinction is an important one, however. The former inference would result in the erroneous conclusion that a considerably large quantity of meat (ten animals) was consumed when, in fact, a far less quantity is indicated (ten cuts). Establishing minimum numbers, therefore, will be based upon the contrast of cuts of meat with total skeletal elements. These figures will then be used to determine the contributing flesh weight of various taxa to the total diet (Lyman 1979; Casteel 1974; 1977). Many regression formulae have been developed through which flesh weights may be derived. In effect, bone weight of animals of known age correspond with particular biomass or flesh weight (see Simpson et al. 1960; Wing 1976; Reitz 1982; Casteel 1978; Pienaar and Thomson 1969). Total weights per species will then be combined to determine total consumable biomass.

Establishing the time of year or seasonality in which the animal was killed will be determined in a variety of ways, each depending upon the animal in question. An assessment of seasonality for mammals may be accomplished by taking thin sections of bone and teeth. Birds may be seasonally dated by examination of the medullary bone (Rick 1975), and fish by examination of scales (Yerkes 1981), otoliths, pectoral elements, and opercular bones (Marzolf 1955; Bardach 1955). Davidson (1982) had inferred seasonal occupation through an examination of the various cuts of meat, and equated soup and stewing portions with cold weather (winter). In a study of cod and haddock fish remains Singer (1982) determined a winter season as the time of catch. Based upon this data, it was concluded that the fish were the product of the New England winter fishery, rather than the Newfoundland spring-summer fishery. Seasonal dating is an important element in faunal analysis, and may reflect origins of animals (Singer 1982) and seasonally preferred or available diets.

Butchering practices will be an important parameter through which socio-economic evaluations will be based. Singer (1982:16-17) documented a variety of butchering marks peculiar to fish. A comparison of the presence and/or absence of specific skeletal remains and butchering marks, noted on fish bones, resulted in the discernment of specific butchering formats. The forms in which fish were acquired can often lead to inferences regarding preparatory techniques. An index was subsequently developed for the Northeast region (Singer 1984) which allows more than twenty

fish species to be economically ranked. Schulz and Gust's study (1983) contains a detailed account of ranking beef cuts based upon butchered bone, as does Lyman's study (1977). The latter models may also be applicable to pig, sheep and goats. These indices should allow an assessment of socio-economic status to be made for a large variety of faunal remains, thus providing additional insight into the dynamic interaction between foodways and socio-economic levels.

Culinary practices may be discernible through the analyses of the various taxa and their respective butchered forms. Period cookbooks constitute the major source of past foodways preparatory techniques (Beeton 1861; Glasse 1747; Porter 1871; Randolph 1860; Ude 1828). In conjunction, archaeological studies have included culinary reconstructions (Graffam 1982; Singer 1982, 1984b; Klein & Garrow 1983; Cheek et al 1982). Preparatory analyses will include comparisons with documented culinary practices (Brillat-Savarin 1825; Bullock 1938; Davidson 1980; Elias 1978; Langseth-Christensen 1970; Root 1981; Silitch 1976). Comparison of the food remains, butchered forms, and associated floral remains with historically prescribed recipes may reveal site-specific, local, regional, ethnic, or economic cooking practices.

Molluscan remains are a valuable resource, and have contributed significant data through which assessment of dietary patterns have been enhanced. An identification of mollusks recovered from archaeological deposits may reveal shellfish preferences (oyster, mussel, clam, etc.). Unionid communities are precise regarding their habitats (Matteson 1960). This factor provides a tool through which environmental reconstructions can be made, and can be indicative of shellfish resources. Furthermore, shellfish remains can be indicative of the conditions of molluscan beds, e.g. crowded or sparse. Oysters that have reached maturity (large), and are not deformed, indicate that oyster beds were not overcrowded. This condition is indicative of a frequently harvested bed, as opposed to a natural unharvested bed. In the latter case, shells are usually small, immature specimens exhibiting deformities (Graffam 1982:67). Molluscan studies have also been utilized to estimate population size based upon shell weight and volume; nutrition evaluations have been made based upon meat weight (Cook 1946). Each of these various forms of analyses could contribute towards the understanding of food resources, environmental exploitation, and dietary patterns in the Oxon Hill area.

Archaeological deposits containing faunal remains have been indicative of specialized activity areas. For instance, deposits relating to food consumption will usually contain an array of skeletal elements, whereas deposits relating to butchering activities may consist primarily of skull and foot bones (Miller and Lewis 1978; Lyman 1977). A detailed analysis of bone elements from various deposits may be used as an effective measure in defining highly specialized land use patterns.

Assessment of status will depend largely upon evidence of butchering, the ability to identify cuts of meat, and seasonality. Bellantoni et al. (1982) noted a preference for the highest beef cuts. Seasonality is usually overlooked as a possible source of socio-economics. The butchering of beef and pork was seasonally distinct (Rothenberg 1980), and the procurement of one or the other out of season would entail a higher expense. Similarly, various fish can be in or out of season, and procurement of those species out of season would be more costly. Consequently, species of fauna recovered that are not in season may be interpreted as evidence of high status.

The importance of archaeological floral remains has been only seldom emphasized (Noel Hume 1974). More recently, however, excellent studies have been written (Taylor 1982; Graffam 1981; 1982; Henry 1982; 1983; Cheek et al 1982). Seed analysis has been successfully utilized as a relative dating tool (Taylor 1982; Graffam 1982). The dates of introduction for many plants have been documented (Favretti and DeWolf 1972). These dates can be contrasted against the temporal findings of ceramic and glass materials to produce a cross-check for dating archaeological assemblages. Floral remains have also been utilized to reconstruct environmental surroundings, and can be indicators of environmental change (Taylor 1982). Stratigraphic levels can be seasonally dated when associated with plant remains of known growing seasons. Vegetable and fruit seeds are obvious indicators of diet. Few fruits, e.g. figs, were imported from abroad, and may be consequently somewhat more expensive than other items. The presence of imported or exotic vegetal remains can be indicative of the consumer's status.

Floral remains may be instrumental in delineating specific areas of land use. Eighteenth-century colonial gardens of country estates were usually elaborately designed, reflecting either the natural style or the parterre plan. Stroud (1957) noted that in the early eighteenth century Joseph Addison redesigned his estate in such a way as to simulate a wilderness. Estates on the magnitude of Mount Vernon contained fenced areas designated to confine deer. The natural style was not a regional phenomena, but rather a social one; the late eighteenth-century Elias Haskett Derby Mansion in Salem, Massachusetts contained a deer park, as did many English estates. By the late eighteenth century, the wealthiest colonial estates were designed in natural style. Mount Vernon was considered to be an outstanding example of an estate which combined both elements (Favretti and DeWolf 1972). An estate such as this contained an open lawn (bowling green) encircled by trees; on either side of the serpentine shaped lawn were parterred flower and kitchen gardens, both the same size and shape. This tendency for landscape symmetry is paralleled in architecture, probably a product of the Georgian mind-set (Deetz 1977). It is anticipated that this desire to display order will be reflected by the formal gardens of Oxon Hill in much the same way it was manifested at

Mount Vernon. Thus, floral remains will constitute an important component of data recovery and data analysis.

Each of these research questions must be individually addressed before any conclusive statement regarding status and diet can be made. The utilization of a systemic approach to foodways research can produce a complete reconstruction of the dietary patterns of the Oxon Hill occupants.

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C. COMPUTER SERVICES

A complete discussion of our proposed computer services is presented in section V below of our Technical proposal.

D. SUBCONTRACTOR RESPONSIBILITIES

Garrow & Associates, Inc. proposes to use several subcontractors during the Oxon Hill Manor project. These subcontractors were selected because of the high degree of expertise and experience each possesses in his/her area of specialization. All subcontractors will receive their direction from (and report their findings to) the Co-Principal Investigators. Coordination of schedules for subcontractor progress and submission of deliverables will be the responsibility of the Project Manager. The Project Manager will also handle all administrative aspects of subcontractor relationships (primarily invoicing). Of course, the technical information to be provided by subcontractors will be of extreme interest and importance to the Field/Office Director, and he will be coordinated with closely during all subcontractor communications. As a practical matter the Field Director will have to deal on a day-to-day basis with the conservation, floral, and historical specialists; formal direction and control, however, will remain with the Co-Principal Investigators.

Garrow & Associates staff have worked on prior projects with all subcontractor specialists proposed (excepting the backhoe operator). This experience allows us to have complete confidence in the high technical quality of subcontractor efforts, as well as in their capabilities for close coordination.

Subcontractors will be responsible for floral (ethnobotanical) identification and analysis, historical and archival research, direction of the conservation program, design of a safe, structurally sound shoring/bracing system for excavation of the well in Area I, and heavy equipment (backhoe) operations. Letters of commitment for all these subcontractors (excepting the backhoe operator) are presented in section VI below of this Technical Proposal.

Our floral subcontractor is Ms. Cheryl Holt of Alexandria, Virginia. Ms. Holt has a number of years of experience in ethnobotanical analysis in the Mid-Atlantic region. She has authored and co-authored several articles dealing with this subject. Ms. Holt is currently completing her dissertation as the final part of her Ph. D. requirements at Brandeis University.

Ms. Holt maintains an office/laboratory in Alexandria, Virginia, close to the Oxon Hill Manor locality and will perform her analysis there. She will be available to direct and instruct field personnel as necessary in recovery of data and installation of flotation equipment at the site or at our Field Laboratory. Her close location will allow rapid reporting of results and

incorporation of her interpretations into developing field interpretations and strategy. Ms. Holt will begin processing samples as soon as they are available from the field to insure this rapid feedback.

Ms. Katherine Singley will be our subcontractor conservation director for the project. Ms. Singley has many years of training and experience in the conservation of archaeological specimens, most recently as Conservator for the Institute of Archeology and Anthropology at the University of South Carolina. In that position, Ms. Singley was responsible for conservation of specimens recovered from both prehistoric and historic archaeological sites, as well as a large variety of artifacts recovered from underwater contexts (including entire canoes and a Colonial era coastal trading ship).

Ms. Singley currently maintains an office/laboratory in Bethesda, Maryland, close to the Oxon Hill project area, where she performs consulting for the Smithsonian Institution and Walter Reed Hospital, among other clients. She will be responsible during the project for directing our conservation program, including installation of appropriate equipment in our Field Laboratory and monitoring ongoing conservation. She will be on call for emergencies, and can respond quickly to immediate needs. Ms. Singley maintains in her laboratory specialized equipment and supplies should they be necessary on an emergency basis.

Byrd, Tallamy, MacDonald, and Lewis, Consulting Engineers located in Falls Church, Virginia, have agreed to design and supervise construction of a shoring/bracing system which will allow safe manual excavation of the well feature in Area I at Oxon Hill Manor. Mr. Raymond A. Koenig, Jr., P. E., and Senior Engineer will direct their efforts. We feel this engineering expertise is essential to safe well excavation, and we are confident of the capability of Byrd, Tallamy, MacDonald, and Lewis to provide this service.

Archival research will be conducted by Historic Property Associates, of St. Augustine, Florida. The research will be directed by Dr. William R. Adams and Dr. Michael C. Scardaville, both Principals of that firm. Garrow & Associates, Inc. has worked closely with Dr. Scardaville on past projects, and his and Dr. Adam's considerable expertise in applied history will prove to be quite valuable on the Oxon Hill Manor Project. The research to be conducted by Historic Property Associates, Inc. will adhere to the research methods outlined in section II. A. of this proposal.

E. LINES OF RESPONSIBILITY AND MANAGEMENT AUTHORITY

Garrow & Associates, Inc. believes that lines of authority and management responsibility should be clear and unambiguous to provide for efficient project performance. Technical, management, and administrative functions should be clearly demarcated, and all project personnel should be aware of their responsibilities and assignments. We recognize, however, that a complex technical project involving a number of distinct, but allied professional disciplines will necessitate close coordination and cooperation. Garrow & Associates proposes a rigorous management system for the Oxon Hill Manor project; this system, however, maintains the close working relationships necessary for high quality project performance.

Garrow & Associates has designated Ms. Barbara Garrow as Project Principal for the Oxon Hill Manor project. Ms. Garrow will be final authority for all corporate decision making and will be ultimately responsible for all actions of the firm.

Mr. Patrick H. Garrow will serve as Co-Principal Investigator and will be responsible for all historic period archaeological work, both in the field and in the office. Mr. Garrow will be senior Co-Principal Investigator, and his decisions will be final on technical matters. The Project Manager and the Field/Office Director will report directly to Mr. Garrow. Mr. Garrow will delegate prehistoric archaeological work to the supervision of Mr. Paul E. Brockington, Jr.

Mr. Brockington will supervise and direct all technical work dealing with the prehistoric occupation at Oxon Hill Manor. The Field Director and Project Manager will report directly to him on these matters. Should Mr. Garrow become unable for any reason to carry out the duties of senior Co-Principal Investigator, Mr. Brockington will assume that responsibility. Mr. Brockington and Mr. Garrow have worked together successfully on a number of projects over several years. Their relationship on this project will continue that close cooperation and coordination, and should insure success of the project.

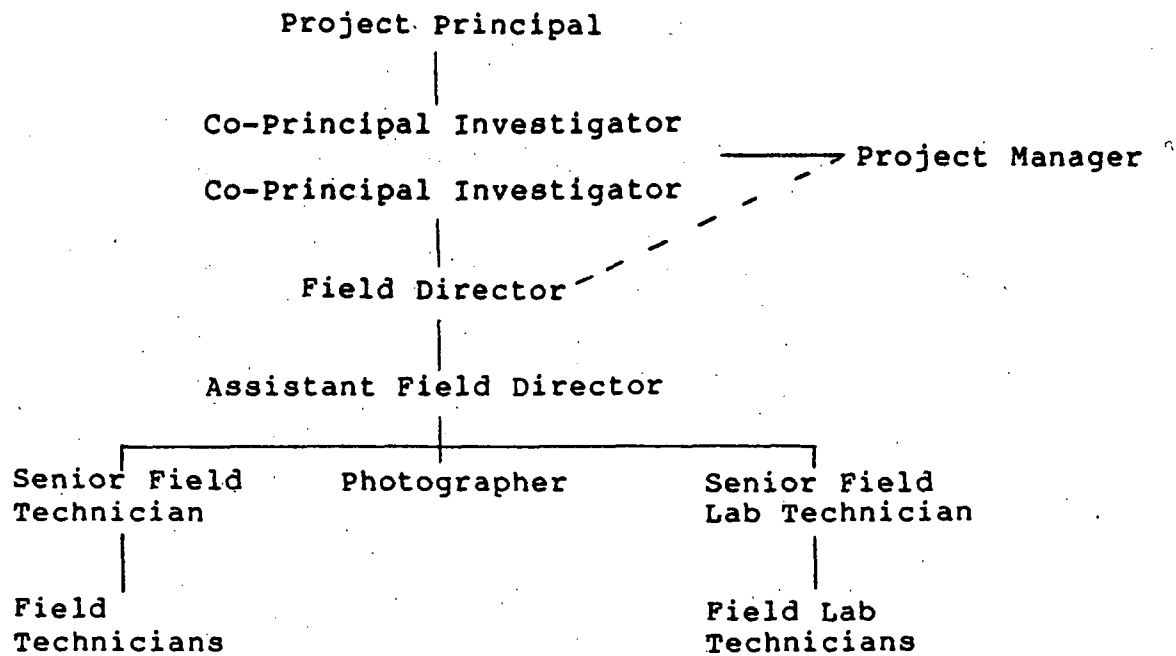
Mr. James R. Wilson will serve as Project Manager and will direct all administrative tasks associated with the project. Mr. Wilson will be based in the Field Laboratory during the field excavation phase of the project and will insure smooth logistical operations.

Mr. Wilson's role will be to free the Co-Principal Investigators and the Field/Office Director from the necessarily complex administrative tasks associated with such a large, complex project and allow them to focus their attention on archaeological research matters. Mr. Wilson has worked on a number of projects with both of the Co-Principal Investigators and the Field/Office Director. Mr. Wilson will report directly to the Co-Principal Investigators, but will coordinate closely with the Field/Office Director.

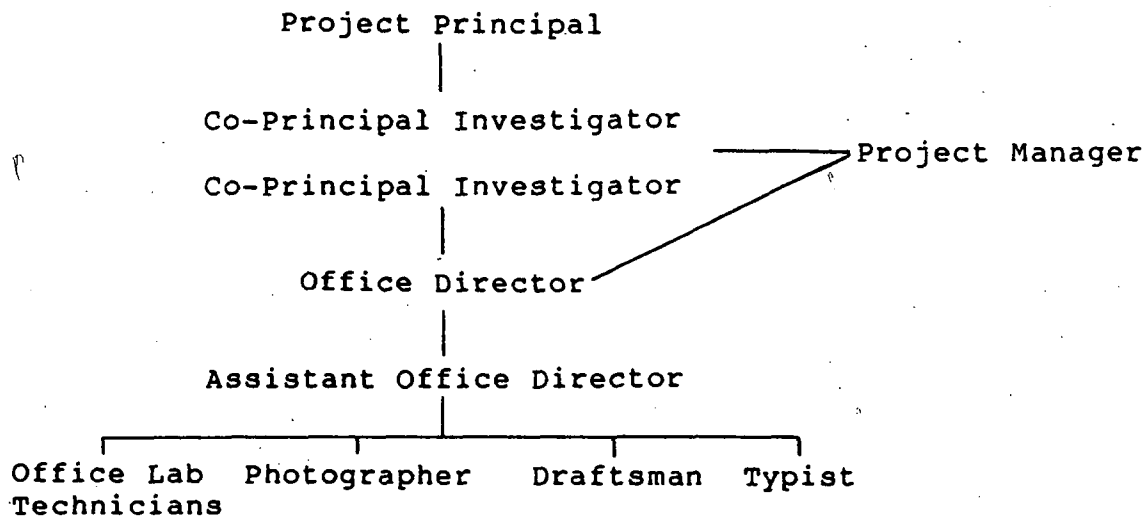
Field/Office Director for the project will be Mr. Thomas R. Wheaton. Mr. Wheaton, in addition to extensive technical experience, also has management experience and has proven through direction of a number of complex projects his capability to direct large numbers of field and laboratory personnel. Mr. Wheaton has worked successfully with all project principals on past projects. Mr. Wheaton will report to both Co-Principal Investigators, and will coordinate closely with the Project Manager. He will directly supervise the field and laboratory crews; he will be assisted by an Assistant Field/Office Director.

These lines of responsibility are presented in graphic form in the following two figures.

FIELD



OFFICE



III. KEY STAFF

As required by the Project RFP, the four Key Staff for this project are:

-Co-Principal Investigator - Patrick H. Garrow will serve as Principal Investigator with primary responsibility for the overall technical management of the project. He will also have primary responsibility for technical decisions concerning historic resources during the field and laboratory/reporting phases.

-Co-Principal Investigator - Dr. Paul E. Brockington, Jr. will also serve as a Principal Investigator. He will function in a support capacity to Mr. Garrow, as well as having primary responsibility for technical decisions concerning prehistoric resources during the field and laboratory/reporting phases.

-Project Manager - James R. Wilson will serve as Project Manager with primary responsibility for the administration and management of the project as well as serving as the initial contact person and liaison with the State Highway Administration. Mr. Wilson was not shown as Project Manager in the original Statement of Qualifications submitted on this project by Garrow & Associates, Inc. He was substituted for Barbara Avery Garrow in that capacity when it became obvious that the Project Manager needed to be located in the temporary field laboratory on a full-time basis during the fieldwork. Ms. Garrow will still be available to lend support to Mr. Wilson as needed.

-Field Director - Thomas R. Wheaton will serve as Field Director and Director of the laboratory/reporting phase. Mr. Wheaton's primary responsibility will be to implement the decisions of the Co-Principal Investigators and to supervise daily technical operations of the project. Mr. Wheaton replaces Ms. Linda France, who was listed as Field Director in the Statement of Qualifications submitted for this project. Subsequent to submittal of the Statement of Qualifications, Ms. France entered graduate school to pursue her Ph.D., and she will be unavailable for this project.

A brief statement detailing the responsibilities of each Key Staff member follows, as well as their one page resumes.

CO-PRINCIPAL INVESTIGATOR RESPONSIBILITIES

The Co-Principal Investigators are responsible for all technical aspects of the project, including preparation of the project Research Design and Research Methods statements. It is the responsibility of the Co-Principal Investigators to monitor the progress of the field and laboratory phases of the project, and to insure that all phases of the field and laboratory work are conducted accurately and following described methods.

Planning Phase : The Co-Principal Investigators will participate in the planning phase to insure that all needed technical arrangements are made prior to the initiation of project operations. The Co-Principal Investigators will make final decisions regarding the hiring of technical staff, and will establish equipment and supply lists to insure that the field and laboratory efforts are adequately supported. Further, the Co-Principal Investigators will inspect the proposed temporary laboratory space to insure that it is adequate to fulfill project goals.

Field Phase : During the fieldwork, the Co-Principal Investigators will make regular field inspections to insure that the fieldwork is proceeding according to plan, and to assist the Field Director in making critical technical decisions. Further, the Co-Principal Investigators will make regular inspections of the temporary field laboratory in order to insure that laboratory processing is proceeding according to plan. The field and laboratory visits will have the additional purpose of insuring that the Co-Principal Investigators are fully aware of what is done in the field and laboratory, so that they can take an active and meaningful role in the preparation of the project report. The Co-Principal Investigators reserve the right to make final and binding project technical decisions.

Laboratory Phase/Reporting Phase : The Co-Principal Investigators will assume the responsibility for technical decision making during all phases of the project. Decisions concerning analytical interpretations, report content and format (within guidelines negotiated with the client) will be made by the Co-Principal Investigators.

PROJECT MANAGER RESPONSIBILITIES

OVERALL : With the direction and support of the General Project Manager (Barbara Avery Garrow, President) for the duration of the contract, the Project Manager will be responsible for the administration and management of the project and will serve as the primary liason with the client. Throughout the contract, the Project Manager will report directly to the General Project Manager and will coordinate with the Principal Investigators and the Field

Director. The primary objective of this full-time position is to insure that productivity matches project schedules, and that project reporting and deliverable requirements are met. The following details these responsibilities by each project phase.

PLANNING PHASE : To insure that the necessary infrastructure is in place prior to the initiation of fieldwork, the following tasks will be accomplished:

- on-site client liason,
- local fiscal arrangements,
- selection of housing,
- arrangement for and placement of on-site trailer,
- procurement of equipment and vehicles,
- rental of local field lab/office facility,
- setting up of telephone and computer communications,
- outlining daily, weekly, and monthly internal and external reporting procedures (personnel, expense, productivity, and invoicing records and reports),
- administration of local project staffing, and
- preparation of initial audit (as required by client).

While the planning phase for a project the size of Oxon Hill would be expected to require one man-month, all personnel time expended beyond 80 hours will be carried as an overhead expense.

FIELD PHASE : During the fieldwork, the Project Manager will be on-site to accomplish the following:

- administrative liason to client and to firm,
- on-going supply procurement,
- execution of record and reporting procedures established during planning phase,
- personnel management,
- progress analysis and reporting,
- budget control,
- review of project financial statements,
- development and distribution of payroll, and
- close down of field operation support systems.

This key position is provided so that the key technical staff can concentrate their full efforts and expertise on insuring that the technical execution of the project meets the expectations of the firm and the client.

ANALYSIS AND REPORTING PHASE : All of the on-going tasks outlined during the field phase would continue during this phase plus the following:

- editorial and graphics monitoring,
- report production, and
- preparation for final closeout audit.

Experience of Garrow & Associates, Inc. has shown that management of this last project phase is the most demanding to insure that the project deliverables meet the firm's and the client's expectations.

FIELD DIRECTOR RESPONSIBILITIES

The Field Director will be responsible for the day to day management of the excavation program and the laboratory analysis. He will direct, through an Assistant Field/Office Director, the crew of Senior Technicians and Field/Lab Technicians. The Field/Office Director will assure inventory control over all field and laboratory collections, and will be responsible for insuring the technical accuracy of all notes and other documents in the absence of one of the Co-Principal Investigators. The Field/Office Director has the additional responsibility to coordinate his activities with the Project Manager so that logistical arrangements and administrative tasks will proceed smoothly.

The Field/Office Director will have analysis design and report preparation duties, under the supervision of the Co-Principal Investigators, during the office phase of the project, and will be expected to author or co-author major sections of the project report.

KEY POSITION: Co-Principal Investigator

PATRICK H. GARROW

EDUCATION:

University of Georgia, Athens, Georgia,

Master of Arts, Anthropology, 1968

University of Georgia, Bachelor of Arts, Anthropology, 1966

GENERAL EXPERIENCE:

Mr. Garrow has 19 years experience as an archaeologist in the academic, public, and private sectors. He has served as Project Manager, Principal Investigator, or Senior Technical Consultant on more than 300 cultural resource projects, and has directed a number of extremely large historical archaeological projects.

PROJECT RELATED EXPERIENCE:

Mr. Garrow has served as Project Manager or Principal Investigator on a number of projects that are pertinent to the Oxon Hill Manor investigations. He served as Principal Investigator on the Vaughan and Curribboo slave quarter excavations in Berkeley County, South Carolina, and has authored a number of professional papers on Afro-American archaeology. Further, he served as Principal Investigator on the Washington, D.C. Civic Center Project, which investigated complex urban historical archaeological deposits. He also served as Project Manager, report co-editor, and major report contributor on the Wilmington Boulevard Project, which investigated 7 blocks in one of the oldest sections of Wilmington, Delaware. His large project experience includes serving as Project Manager on excavation of two city blocks on the edge of the Financial District in New York City. Investigations on one of those blocks led to the discovery and excavation of an eighteenth century merchant ship that had been encapsulated as a landfill component in the mid-eighteenth century. Mr. Garrow brings a high level of technical expertise and experience to his role of Co-Principal Investigator on the Oxon Hill Manor Project.

KEY POSITION: Co-Principal Investigator

PAUL E. BROCKINGTON, JR.

EDUCATION:

University of South Carolina, Columbia, South Carolina
B. A., Anthropology
University of Kansas, Lawrence, Kansas
M. Phil., Anthropology
University of Kansas, Lawrence, Kansas
Ph. D., Anthropology

GENERAL EXPERIENCE:

Archaeological research and management experience has been evenly divided among the public, academic, and private business sectors. Served as Environmental Impact Archeologist for the South Carolina State Archeologist/Director of the Institute of Archeology and Anthropology, and as Chief of Contract Research for the Museum of Anthropology, University of Kansas. Branch Manager and Vice President for Soil Systems, Inc., directing and managing archaeological projects in the Plains, Midwest, Southeast, and Mid-Atlantic regions. Primary training with prehistoric archaeology, but also experienced in historic archaeology. Management experience with a variety of large, complex projects is extensive.

PROJECT RELATED EXPERIENCE:

Served as Vice President for Soil Systems Inc.'s Mid-Atlantic regional office in Washington, D. C., directing and managing projects in Virginia, Maryland, Delaware, New Jersey, and New York. These projects ranged from small surveys to major data recovery efforts, including excavation of nineteenth century hotel remains in Jamaica, Queens, New York; testing in the city of Frederick, Maryland; survey of transmission lines in southern Maryland; architectural and archaeological investigations of Fort Belvoir, Virginia; and various survey and significance assessment studies for the Washington, D. C. subway system. Most recently directed data recovery efforts for the South Carolina Department of Highways and Public Transportation at three sites near Charleston, South Carolina.

LM-5

KEY POSITION: Project Manager

JAMES R. WILSON

EDUCATION:

University of Pennsylvania, Philadelphia, PA,
Master of Regional Planning, 1972

Marietta College, Marietta, Ohio, Bachelor of Arts, 1970

GENERAL EXPERIENCE:

Planning and management experience has been equally divided between the public and private business sectors. Served as Chief of Resource Planning in The Office of Planning and Research for The State of Georgia for six and one half years managing an average of 30 technical persons and developing and administering an average annual budget in excess of \$700,000. Worked with several national consulting firms over a period of eight years attaining positions at the management level and/or becoming an associate and part owner in firms. Responsibilities were primarily program planning, personnel management and fiscal control.

PROJECT RELATED EXPERIENCE:

Early experience with Philadelphia consulting firm characterized by primarily planning responsibilities for varied projects including the Outer Beltway, Baltimore, MD, (I-95) and land use planning (both environmental and cultural) in Vermont, Texas, Florida, Arizona, Louisiana and Pennsylvania. While employed by the State of Georgia, completed Levels I, II and III of the Certified Public Managers program as taught by the state Department of Administrative Services. Directed a planning section divided into six units, developing budgets and programs for each. Was appointed to many interstate and state/federal committees and advisory commissions representing the state. Through these responsibilities gained a wide understanding of governmental procedures. Following state service, founded and organized a private planning consulting firm that continues to be successful but in which no fiscal interest is now held. Moving from Atlanta to Marietta, GA, joined the local office of a national consulting firm and rose to the position of Branch Manager, again being primarily responsible for planning and management. Directed projects in the southeastern U.S. that dealt with cultural resource and environmental data base development and management. Immediately prior to joining with Garrow and Associates, Inc., was Associate and Project Manager for an engineering consulting firm in Georgia for one and a half years. A combination of advanced education and practical experience approaching eighteen years and specifically oriented to planning and project management will be brought to this project by Mr. Wilson.

KEY POSITION: Field/Lab Director

THOMAS R. WHEATON, JR.

EDUCATION:

University of the Americas, Mexico City, Mexico
M.A. Anthropology/Archaeology
B.A. History

GENERAL EXPERIENCE:

Over his nearly ten years of experience as a professional archaeologist, Mr. Wheaton has served in both the public and private sectors both in Mexico and the United States in positions of increasing responsibility. His latest position was with a nationally recognized firm where he served as Branch Manager of the southeastern archaeology division. During his four years with that firm, he directed projects in Virginia, South Carolina, North Carolina, Tennessee, West Virginia, Georgia, Alabama, Pennsylvania, Kentucky, New Jersey, and Maryland. He has served as Field Director or Principal Investigator on well over 50 projects.

PROJECT RELATED EXPERIENCE:

Mr. Wheaton served as Field Director, Laboratory Director, and Principal Author of the Cooper River Rediversion Canal Project in Berkeley County, South Carolina, which focused on the testing and data recovery of two eighteenth century French Huguenot plantations. He has authored or co-authored three papers presented at national conferences stemming from this work which focused on architecture or on african slave archaeology. His experience also includes test excavations of an eighteenth century house site at Kerr Reservoir in North Carolina and Virginia. Other historic work includes the investigation through survey and testing of an abandoned Quaker community in Georgia. Besides being extremely well qualified in historic archaeology, he has successfully directed the study of numerous prehistoric sites.

IV. TIME ESTIMATES - MAN-HOURS

Hours proposed for the Oxon Hill Manor project for each position are presented below. These are organized by the two major phases of the project, field work and office work (final laboratory analysis, report preparation).

Staff position	Field Phase	Office Phase	Total
Project Principal	160	160	320
Co-Principal Investigator	520	520	1040
Co-Principal Investigator	180	180	360
Project Manager	1040	1040	2080
Field/Office Director	1040	1040	2080
Assistant Field/ Office Director	1040	1040	2080
Senior Field Technicians (6)	6240	-	6240
Field Technicians (35)	36,400	-	36,400
Field Lab Technicians (12)	12,480	-	12,480
Office Lab Technicians (12)	-	12,800	12,800
Draftsman		520	520
Typist		1040	1040
Photographer	1040	520	1560
Totals	60,140	18,860	79,000

A more detailed presentation of phase scheduling and completion times is shown in section II,B above of this Technical Proposal.

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40,000

V. COMPUTER USE

Garrow & Associates, Inc. currently owns an Apple IIe, an Apple IIc and a Bausch & Lomb Resource Management System (RMS). The Bausch & Lomb RMS is built around an Apple IIe microprocessor, and accepts all software compatible with the IIe. Each microprocessor has 64K of memory, with 128K of programmable memory. Each microcomputer is supported by an 80-Column Text Card or its equivalent, and the storage capacity of the two IIe based machines can be expanded to 10 megabytes with the addition of a hard disk storage unit. The Bausch & Lomb RMS is connected to a NEC PC-8023A-C dot matrix printer, which can produce high resolution graphics. The interface card used for the NEC printer is a Grappler+, which is well suited for graphics production. The Apple IIe microprocessor is connected to a Diablo 630 daisy wheel printer through an Apple Serial Interface Card. That printer is suitable for production of letters and final report copy. The Apple IIc is not supported by a printer, but material produced on the IIc is compatible with both the Bausch & Lomb RMS and the Apple IIe unit.

The three microprocessors currently used by Garrow & Associates, Inc. are supported by a variety of software. Apple Writer II is used for word processing, and a Sensible Speller Program is used for correcting spelling and typographical errors. Bibliographies are maintained on the Bookends Program, while simple data base management and file functions are supported by the Quick File Program. The Graphics Department Program is used for production of report charts and graphs, while Multiplan is used for financial management. The DOS Master and PRO DOS Master Programs are used for simple programming and as simple utilities program. The Edu-Ware Statistics 3.0 Program is used for statistical manipulations. The most specialized piece of software owned by Garrow & Associates, Inc. at present is the Bausch & Lomb RMS Program Disk (Revision 001.4). That software supports a digitizer which can digitize any scaled data, including maps and scaled aerial photographs. The RMS program includes ten statistical packages that can be used for cross-comparisons of scaled data. That program can be used with either a digitizing tablet or a plotter. Garrow & Associates, Inc.'s staff are currently translating a program similar to SYMAP from FORTRAN to BASIC, so that it can be used on an Apple IIe microprocessor with a dot matrix printer. That program should be completed in time to be used on the Oxon Hill Manor Project.

Garrow & Associates, Inc. proposes to add two Apple IIe microprocessors for the Oxon Hill Manor Project, and one 10 megabyte hard disk storage unit. Further, Garrow & Associates plans to acquire two Apple 1200 Baud modems interfaced with Apple Serial Interface Cards to link the temporary field laboratory and

the headquarters office in Atlanta. That arrangement will be used to transmit both administrative and technical data between the two offices. One piece of software that will have to be added for this project is a dBase II Program for data manipulation. Further, the two microprocessors to be placed in the temporary field laboratory will be fully supported with software similar to that already in use in the headquarters office.

Garrow & Associates, Inc. considers computers and associated hardware and software to be capital equipment, the purchase of which cannot be charged against a project budget. Capitol equipment is purchased from corporate profits, and lease or use charges are not directly or indirectly charged to project budgets in the case of computer equipment. The computers to be used on this project will be converted to work stations upon completion of the Oxon Hill Manor Project, and will continue to be used by Garrow & Associates, Inc.'s staff.

VI. SUBCONTRACTOR EXPRESSIONS OF COMMITMENT

The following statements of commitment have been solicited and received from proposed subcontractors. Garrow & Associates is pleased to be able to bring to the project team the expertise of these specialists. Detailed resumes and statements of project experience for each subcontractor are on file with Garrow & Associates and can be furnished upon request. Brief discussions of subcontractor responsibilities and capabilities are presented above in section II,D of this Technical Proposal.

Historic Property Associates

Post Office Box 1002

St. Augustine, Florida 32084

(904) 824-5178

Historic resource management consultants:

August 28, 1984

- historic property research Mr. Pat Garrow
 - National Register listings Garrow & Associates
 - certification of historic property rehabilitation 2215 Perimeter Park
 - historic property tax benefit research Suite 15
- Atlanta, Ga. 30341

Dear Mr. Garrow:


This letter will serve to confirm our commitment to perform the historical research on the Oxen Hill project. We are looking forward to the opportunity to work with Garrow & Associates on this project.

- historic area surveys
 - historic preservation planning research
- The principals in Historic Property Associates who will be engaged in this project are Michael C. Scardaville and William R. Adams. Our resumes are enclosed.

We will perform the research at a rate of compensation that is determined to be mutually acceptable to the two firms and at the approximate level discussed in our preliminary conversations.

- research and preparation of historic preservation grants
- interpretive studies for historic sites

Sincerely,



William R. Adams
Principal

WRA:ala

- cultural resource impact studies
- archaeological surveys



Analytical Services for Archaeologists

Cheryl A. Holt 208 S. Alfred St. Alexandria, Va. 22314

August 27, 1984

Dear Paul,

The Oxon Hill project is indeed an interesting and challenging one. In fact, the next project on my work schedule now is Mount Clare (Baltimore) which is a garden reconstruction. If Garrow and Associates wins the contract for the Oxon Hill project, I will be glad to do the floral/faunal analysis at the rate I am currently charging (\$100 per day).

Sincerely,

Cheryl

Cheryl A. Holt

KATHERINE SINGLEY

CONSERVATION OF ANTHROPOLOGICAL MATERIALS
P.O. BOX 30764 BETHESDA, MARYLAND 20814
OFFICE: (301) 588-6699

28 August 1984

Paul Brockington
Garrow and Associates
2215 Perimeter Park
Suite 15
Atlanta GA 30341

Dear Mr. Brockington:

In response to your request, I will be pleased to perform conservation services for your firm on artifacts expected to be recovered from the proposed excavations in the vicinity of Oxon Hill, Maryland. I understand that these services will most likely be required sometime during the first six months of 1985. Details on the number of days of work required, equipment needed, and compensation for services and expenses will be worked out at a later date.

Looking forward to working with you.

Sincerely,

Katherine Singley ^{ald}
Katherine Singley

Enclosure:
Curriculum vitae

KRS:ald

BERTRAM D. TALLAMY
Founder, Retired

LLOYD G. BYRD
ROLAND H. BERGER
CLIFFORD C. McMULLEN
DOUGLAS H. BEESON
RAYMOND A. KOENIG
WILLIAM J. BUGLASS

BYRD, TALLAMY, MacDONALD and LEWIS
CONSULTING ENGINEERS
2921 TELESTAR COURT
FALLS CHURCH, VIRGINIA 22042
Telephone (703) 698-9780

MAILING ADDRESS:

MERRIFIELD P. O. BOX 504
FAIRFAX COUNTY, VIRGINIA 22116

August 28, 1984

Paul E. Brockington, Jr., PH.D.
Senior Archaeologist
Garrow & Associates, Inc.
2215 Perimeter Park
Suite 15
Atlanta, Georgia 30341

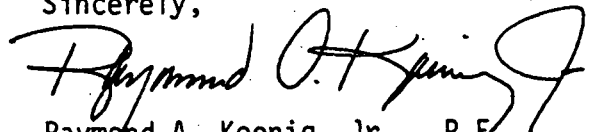
RE: MDOT Oxon Hill Archaeological
Project

Dear Mr. Brockington:

Pursuant to our conversation, we will be pleased to furnish consulting civil engineering services for the above-referenced project. In particular, we will design and monitor the construction of a shoring system to be used in conjunction with the excavation of a colonial era well.

Thank you for calling BTML.

Sincerely,


Raymond A. Koenig, Jr., P.E.

RAK/mcp

Enclosures

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